

# THE TORONTO AREA RAIL TRANSPORTATION OF DANGEROUS GOODS TASK FORCE

## MINORITY REPORT

## THE PUBLIC CONCERN



Presented to

THE HONOURABLE BENOÎT BOUCHARD, PC MP  
MINISTER OF TRANSPORT

Toronto, Canada, July 1988



M-TRAC is a non-profit Metrowide umbrella organization of ratepayers, residents and other groups who following the Mississauga train derailment joined forces to investigate and advocate rail safety in densely populated urban areas. Members are committed to initiate legislative and other changes necessary to ensure public safety particularly in the transport of dangerous commodities by rail.

Harold Morrison is the current Chairman of M-TRAC.

Cover Photo: Toronto Sun

# THE TORONTO AREA RAIL TRANSPORTATION OF DANGEROUS GOODS TASK FORCE

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The Honourable Benoît Bouchard, PC MP  
Minister of Transport  
Transport Canada  
Place de Ville  
Ottawa, Ontario  
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July 11, 1988

Dear Mr. Bouchard:

## MINORITY REPORT – THE PUBLIC CONCERN

While I accept that the Chairman of the Task Force has the responsibility of providing you with the conclusions of the two-year study, the difficulties that have arisen within the Task Force over the main issues and the production of a controversial and misleading Summary have forced me to write this separate report.

As a Task Force member I plead with you not to turn away from the urgent needs of the Metro Toronto community and municipalities. They look to you for protection. Do not deny them these measures that can help prevent the possibility of a disaster with its attendant human suffering and material damage.

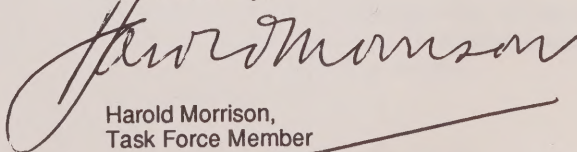
I am one voice among seven. I have participated in the Task Force in good faith in the hope that co-operative effort and reasonable compromise would produce a means of minimizing the very serious situation which exists in the populated area. The consultants have documented the problem with great care and have pointed to solutions.

I have urged the Chairman to accept that speed restraint and eventual rail relocation are essential measures to alleviate the existing risks.

In 1984 The Honourable Don Mazankowski assured Metro Toronto he was aware of the need for a 25-mile-per-hour speed restraint on the heavy dangerous goods rail traffic inside Metro. He was aware of the need for rail relocation.

Can we remain silent in the critical areas where subway systems may become paralyzed and children asphyxiated in their classrooms? Surely this is a situation which cries out for immediate relief.

Yours sincerely,



Harold Morrison,  
Task Force Member

cc: The Honourable Don Mazankowski, PC MP  
The Honourable Barbara McDougall, PC MP  
The Honourable Michael Wilson, PC MP  
Mr. Harold F. Gilbert, Task Force Chairman



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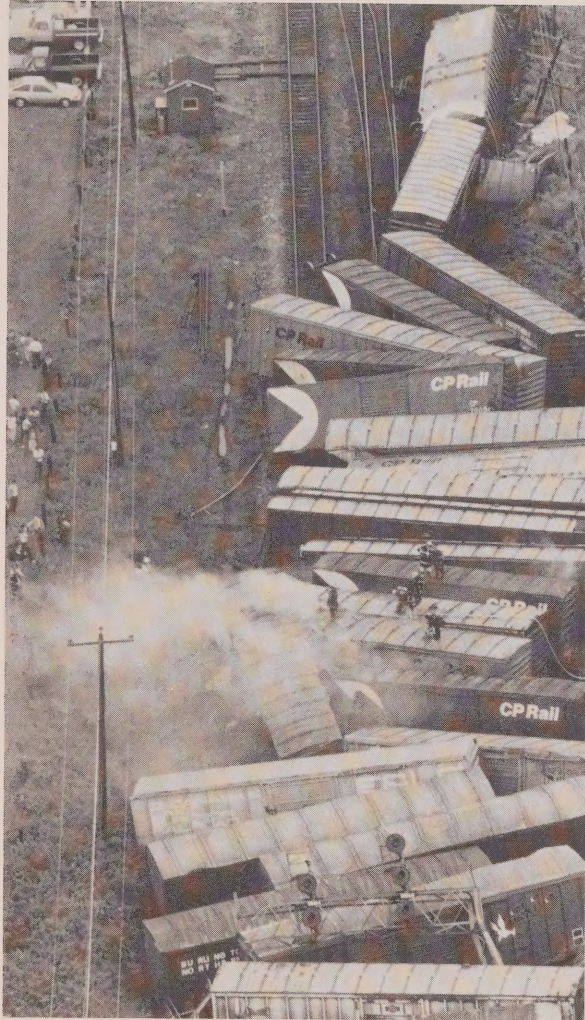
ERRATUM

Page i, Caption	Read: <b>Two</b> (not three) locomotives
Page 18, Line 18	Read: <b>January 1988</b> (not December 1987)
Page 31, Line 4	Read: <b>Two</b> (not three) locomotives
Page 36, Line 2	Read: <b>January 1988</b> (not December 1987)

cars on a 103 – car train  
jump the tracks on the CP  
Eglinton Ave., on July 14,  
ray Transport Committee  
ly months.







Three locomotives and 31 freight cars on a 103 – car train carrying a dangerous chemical jump the tracks on the CP mainline near Don Mills Rd. and Eglinton Ave., on July 14, 1987. Public disclosure of Railway Transport Committee investigation was delayed for many months. (Photo: Toronto Sun)



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*"In the event of an accident and a major release of dangerous commodities in a densely populated area, such as the Galt or North Toronto subdivisions, there exists the possibility of hundreds of fatalities or more."*

- **Ian Burton-Keith Post Report** prepared for the Canadian Transport Commission, 'The Transportation of Dangerous Commodities by Rail in the Toronto Census Metropolitan Area' — May 1983



*"The panel nevertheless finds that the concept of a train speed limit in certain high hazard areas makes very sound sense. The setting of speed limit in this context must rely mainly on the long established track engineering principles and on the powers of intuition and common sense rather than hard statistical data and risk analysis."*

— **Show Cause Hearing Decision on Railway Safety**, Canadian Transport Commission, Railway Transport Committee, September 30, 1981





*"In other words, if we look at alternative A1 (the existing system, including the CP North Toronto Subdivision)...the level of risk borne by the people adjacent to the highest risk segment (CP North Toronto Subdivision) is 26,000 times greater than the level of risk borne by people adjacent to the lowest risk segment."*

— **Risk Assessment for Rail Transport of Dangerous Goods through the Toronto Area**, Concord Scientific Corporation, December, 1987 (explanatory comments added).







— Canapress  
Don Mazankowski  
Deputy Prime Minister  
— constituted the Task Force



— Canapress  
Benoît Bouchard  
Minister of Transport  
— re-affirmed the Task Force

## THE TORONTO AREA RAIL TRANSPORTATION OF DANGEROUS GOODS TASK FORCE



— City Dweller  
Harold F. Gilbert  
Task Force Chairman



— C.P.R.  
Glenn A. Swanson  
C.P.R.



— C.N.R.  
Barry Lee \*  
C.N.R.



— City Dweller  
Harold A. Morrison  
M-TRAC



— City Dweller  
Robert I. Maksymec  
Planmac Consultants Ltd.



— City Dweller  
Anne L. Clark  
Esso Petroleum Canada



— City Dweller  
Richard Puccini  
Government of Ontario

E.J. Legg, Executive Director

Rie Kidman, Project Director

\* replaced J.E. (Jed) Drew and Buck Buchanan



# THE TORONTO AREA RAIL TRANSPORTATION OF DANGEROUS GOODS TASK FORCE

## MINORITY REPORT

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MINISTER OF TRANSPORT

Toronto, Canada, July 1988





### EXPLANATORY NOTE

This report was produced without the consent or support of the Task Force chairman, Mr. Harold F. Gilbert. His reasons are given in this document. (See Appendix A). The member writing this report is therefore grateful to the municipalities of Metro Toronto which provided funds to meet printing and distribution costs.





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## P R E F A C E

The necessity of writing this separate report to the Minister of Transport, Mr. Bouchard, has caused me great personal anguish.

We had the makings in this Task Force of a truly magnificent contribution to the welfare of a major Canadian community. And with guidance and benefits to other communities as well.

But it became evident toward the end of the two-year mandate that positions had become polarized. The majority, mainly comprising the rail lobby, simply would not respond to the request by Metro municipal governments and community groups and boards of education for speed restraint on dangerous goods trains cutting through Metro's crowded, narrow corridors. Speed restraint is essential. There can be no compromise on this vital need, especially in the critical areas of the North Toronto Subdivision (See Appendix B).

Nor would the majority agree that relocation of dangerous goods traffic is urgently needed as a safety measure and as recommended by the Burton-Post Report. In effect, the majority has condemned the people of Toronto to carry the burden of the existing risk for years to come without effective relief.

I was surprised by the Summary of the Task Force Final Report which concluded that the existing rail system is safe and there is really no need for either



relocation or speed reduction despite the outright warnings by the Task Force risk assessment consultant.

I am reminded of the pledge by Donald Mazankowski, PC, MP, and Michael Wilson, PC, MP, in 1984, assuring the people of Metro Toronto of support for a speed limit of 25 miles per hour on the dangerous goods trains, including residue cars. That statement is attached. (See Appendix C).

It may be of some interest to mull over the conclusion by the Institute for Risk Research at the University of Waterloo that the so-called safety of dangerous goods rail traffic is not as profound as the Task Force majority would lead you to believe.

The Institute's final report on assessing the risk between transport of dangerous goods by rail and truck issued in May 1988 stated:

"Preliminary results obtained from the application of the Transport Canada risk analysis model indicate that expected impacts of spills of a representative dangerous good (LPG) in terms of fatalities for the Sarnia-Toronto corridor are approximately three times higher for rail than trucks."

Mr. Mazankowski was well aware of the situation in Toronto and had acknowledged that speed restraint was one of the most effective means of reducing the risk. He insisted that one of the first jobs of the Task Force, which he instituted, was to examine the speed situation and come up with solutions. A limited, temporary speed reduction resulted. Many people in Toronto welcomed that temporary reprieve.

The vital need for speed restraint in these crowded corridors was crystallized by Task Force consultants warning of possible multiple deaths unless mitigating measures were taken at once. Indeed, in a reference to possible consequences, a consultant concluded in a statistical analysis that many thousands of persons may die through a fireball or chlorine plume. No matter how infrequent that kind of event can occur, the mere fact that such a horrendous accident is possible is sufficient, in my view, to warrant strong counter-action.

It takes no scientific expert to sense the misery and chaos should chlorine flow into hospitals or seep into subway stations or spread through senior citizens' homes.

A contributing factor in the Toronto situation is the acknowledged difficulty of evacuation in the event of a chemical spill. Residents may be caught in their apartments. School children may be asphyxiated in their classes. The need for immediate measures to reduce the possibility of an accident—including reduction and elimination of multiple tank car leaks—appears crucial. It has been proven scientifically that reducing the train speed reduces the severity of accident damage.

Eventually, dangerous goods rail traffic must be removed from the high-density area into a protected corridor. But that may take years, perhaps a decade. How, then, shall we safeguard the people at risk? Many measures must be taken. Speed restraint is a known major deterrent.

In my view, and I believe it is a view shared by thousands of Metro people, the denial of speed restraint in the face of the scientific warnings of possible multiple

fatalities may be interpreted by those who are vulnerable that their lives have little value, or are of little concern to the federal government.

If there is any doubt about the benefit of speed restraint as a measure of safety, the very least we can do is to turn that doubt to the benefit of those at risk.



One of thousands of dangerous goods cars block school children walking home at Osler Street. (Photo: Rob Allen)

## **I. THE MEANING OF MAJORITY**

The Task Force was made up of seven members, headed by veteran administrator Harold Gilbert, former Ontario Deputy Transport Minister. Other members were drawn from a variety of callings but any astute observer could soon discover that the majority represented or supported the rail lobby.

This is the problem in referring to a majority-minority split. The majority, which held the upper hand, really represented the rail industry view and when it came to a showdown vote, the public of Metro Toronto was simply beaten.

The make-up of the Task Force could have been different. There could have been strong representation from the 2,200,000 people of Metro Toronto but the selection of members was not in the hands of those at risk. It was in the hands of the federal government and the Chairman of the Task Force. The public simply had to live with the results. There came a point in the proceedings where those from the rail lobby attempted to eject this dissenting member because he would not agree with the majority view. This is the kind of situation and the kind of discord that seemed to predict the results that followed.

Alan Redway, a Member of Parliament, warned Task Force members in a public appearance that each member would be held accountable for his or her actions in the Task Force. So it became a matter of concern that the Final Report of the Task Force did not identify the "majority" by name, thereby throwing a cloak of anonymity over the decision-making process.

For the purpose of this report, the Members of the Task Force are identified as follows:

Harold Gilbert, Chairman; Glenn Swanson, Canadian Pacific Railway Vice-President; J.E. (Jed) Drew, Canadian National Railway, later replaced by Buck Buchanan and Barry Lee; Harold Morrison, M-TRAC Chairman; Robert Maksymec, President of Planmac Consultants Ltd.; Anne Clark, Esso Petroleum Canada; Richard Puccini, Executive Director, Municipal Transportation Planning, Ontario government. (See Appendix D).

Mr. Gilbert designated Mrs. Clark and Mr. Maksymec as representatives of “the public at large”. In my view this designation was a misnomer. These two members generally sided with the railways and formed the “majority” view. In my mind they became known as the Group of Four, the bed-rock opposition.

I make this statement to prevent the possible misinterpretation of the Final Report as reflecting a widely-held majority view in Metro Toronto. This was not the case. For the most part the majority view in the Task Force was simply the rail lobby view and although the Metro Toronto population is great in numbers, it was not great in representation in the Task Force make-up.

When I was informed that six out of the seven members of the Task Force had endorsed a Final Report Summary—even before the Final Report was completed—and that the majority endorsed statements that existing rail lines in Metro were safe and needed no real change or even moderate speed reductions, I decided there was no way I could endorse such statements. Nor could they be endorsed by the general public of Metro Toronto.



## II. PERCEPTIONS AND ERRORS

When I accepted Mr. Mazankowski's invitation to join this special Task force in 1986, I was pleased to join, to be able to perform this public duty. And Mr. Mazankowski expressed his gratitude. I served in good faith, without compensation from any source with the exception of out-of-pocket expenses.

The appointment of Mr. Gilbert as Chairman gave me added encouragement. So did the presence of Mr. Swanson, then CP Rail general manager and now a vice-president. I had every reason to believe that divergent views would coalesce, with benefits for the largest concentration of population in all Canada.

Results fell far short of expectations. Part of the reason, I believe, was the make-up of the Task Force and part the characteristics and inadequacies of two of the consultants' reports.

I believe, Mr. Minister, you will be impressed with the work of the main consultant, the IBI Group, and with the work of Concord Scientific Corp. and the Institute of Environmental Research. They provided the Task force with sincere and objective research. I believe the public and the government were not as well served by Ekos Research Associates Inc., which did the perception survey, and by Delcan, which did the speed report.

It should be a matter of record that one of the Ekos conclusions, that the people of Metro Toronto did not want and would not support relocation of the

dangerous goods traffic, raised questions among community groups. They wondered whether this was an attempt to mislead the Task Force and the general public. (See Appendices E and F).

Searching through the results of the Ekos perception survey, I found no reasonable basis for this conclusion but I realized that if it was true, there would be little reason to continue with the work of the Task Force.

I appealed to the M-TRAC organization, of which I am chairman, to seek to verify the Ekos statement. A reliable Toronto researcher was hired at M-TRAC's expense. The survey was not confined to the City of Toronto but stretched across Metro from Scarborough to Etobicoke. And the results were startlingly different from the Ekos statement. More than 70 per cent of the people within a two-mile swath of the CP line supported relocation to a safe corridor and about 50 per cent stood ready to pay higher taxes to get the job done.

The City of Toronto, on being told of these results, ordered its own survey, using different questions, and the results were similar to the larger M-TRAC study. Both surveys were submitted to the Task Force.

Delcan won two Task Force contracts—one on buffers and the other on speed. The buffer study was well-balanced and productive but the speed report gave me reason to suspect bias and misdirection. The inadequate nature of this report, which went to the heart of the Metro Toronto appeal for lower speeds on dangerous goods traffic, was confirmed by the National Transportation Safety Board in Washington, D.C. But I fear that despite the criticism and the controversy surrounding speed report conclusions, the Task Force majority was prepared to accept what the speed consultant had to say; in fact, leaped at what the consultant presented probably because it fitted the majority's views. (See Appendix G).

I am reminded by what Charles Batten of the National Transportation Safety Board stated during discussions with me and the Task Force Project Director in Washington. There had to be special care in the selection of a consultant.

Mr. Minister, I rationalized the entire process as one in which all Canadians, no matter what their calling may be, had a duty to the Crown and to the general public. In this case, they had a duty to provide objective reflection and decision-making in the hope of reducing an obvious serious risk to a large portion of the Canadian public which had become an innocent victim of a situation beyond local control.

I had hoped all Task Force members would set aside their personal and business interests and reach out to the vulnerable public with strong and determined solutions. As we proceeded with the two-year investigation and debate, it became evident that this kind of consensus would not take place.



Chemical plant and tank cars next to CP Belleville Subdivision appear overpowering as children approach Sheppard Avenue underpass in Scarborough.



### III. WHO SUPPORTS A HIGHER SPEED?

Anyone leafing through the Task Force documentation would surely be impressed by the huge volume of demands for a lower dangerous-goods train speed in Metro Toronto.

This appeal reaches you, Mr. Minister, from many directions—from the councils of the municipal governments, from the school boards, from the many community associations and individuals, including those holding professional degrees in engineering, chemistry and law.

Evidence of this almost universal and overwhelming appeal is recorded in the Task Force documents. This is probably the greatest outpouring of demand for lower dangerous-goods speeds ever recorded in our country.

The opposition to a speed limitation appears to come mainly from one direction—the railways and those associated with them. CP Rail warned a year ago that it intends to remove the current temporary restrictions and allow dangerous goods trains to proceed through the highly-populated narrow Toronto rail corridor at speeds of up to 50 and 55 miles per hour in accordance with existing federal and rail industry policy.

The two-year speed limit, although constricted in scope, was an acknowledged benefit to the people of Toronto. And Mr. Mazankowski, then Minister of Transport, publicly praised this reduction although he did not inform



the media at that time that the speed reduction was terminable by CP Rail. (See Appendix H ).

Nor did the Task Force in its brochure to the public refer to the fact that the speed curb would be eliminated in two years. (See Appendix D). We in the Task Force, of course, knew that the restriction was temporary. I, for one, hoped it would lead to a permanent and wider restraint.

The Toronto public had a feeling that something was being done; that the risks associated with rail transport of toxic and explosive chemicals were being reduced. Someone in Ottawa was looking after their interests.

Unless you act, Mr. Minister, this is now about to change. Current speeds are to be escalated; cabooseless trains carrying dangerous goods are to move through Toronto at speeds of 50 and 55 miles per hour amid the horrors painted by Task Force consultants of such possible threats as chlorine plumes, jet fires and fireballs that could bring disaster to the helpless and the innocent.

A Task Force speed consultant has warned that each time the speed is moved up the number of chemical tank cars which may be breached in a derailment also may increase. The scientific evidence warns that the extent of damage from a derailment increases with the speed of the train.

Can we afford such a risk in an area which holds roughly 10 per cent of the entire Canadian population? Why are we taking this risk? What great advantage is there to CP Rail to push for a return to higher speeds? How much extra profit will it achieve? The track distance to be covered in the most vulnerable area is no more than 20 miles.

Can we afford 11,000 deaths through a chlorine plume simply to add a few cents to the CP register? I have stated in the Task Force that a higher speed, under the shadow of the consultants' warnings, is indefensible. I repeat it here. The danger is too great; the stakes too high to risk an escalated speed in such a narrow, vulnerable corridor.



Clarens Square Apartment Hotel complex in high-risk Junction Triangle area overlooks rail lines and Wiltshire Avenue transformer storage yard. (Photo: Rob Allen)



#### IV. JUGGLING THE SPEED FIGURES

When the Delcan speed consultant produced his \$70,000 report for the Task Force, there was an exclamation from a rail company representative that there never was a need to lower the speed to 25 miles per hour in that narrow North Toronto corridor.

What did this report show? It argued that more trains derail at lower speeds than at higher speeds; that 25 miles per hour is a relatively unsafe speed and if you want the people of Toronto to be safe, let the dangerous goods trains go faster.

Of course, he also stated that more cars derail at higher speeds and the faster you go the more likely you are of ending up with more tank cars spilling their contents in a derailment. And, he added ominously, there likely will be “severe consequences.”

The consultant left it to others to explain what these “severe consequences” would involve. Concord Scientific Corp., another consultant, removed the mystery—maybe a few dead, maybe 11,000 dead. Maybe a small fireball hovering over the city. Or maybe a holocaust. Is this fantasy? Look elsewhere in North America and you will find that it is not!

And what grounds did the speed consultant have for his curious conclusions on higher speeds? He simply gathered all the mainline accident figures he could find in the United States and Canada, mixed them in a computer bowl and hocus

pocus, a world-shaking scientific fact that faster is safer. Did he contemplate that the faster a long, heavy train goes the more time it takes to stop that train in the event of an emergency? He did not seem to dwell on that fact or on the fact that the North Toronto Subdivision lies on an embankment, thereby increasing the likely damage in an accident.

It seemed to matter little that the consultant's accident reports were deficient; that he failed to group U.S. accidents by track class, and that he had failed to tell the Task Force he had been dealing with deficient statistics. It appeared to be more important that Delcan had lent credence to the rail argument, that there is no need to slow the dangerous goods trains in Toronto, even though most of the serious rail accidents occur at high speed. It is no wonder that the consultant involved did not remain in his firm long after his report was published and soundly criticized.

And it seemed to matter little to the Task Force majority that the report, spread before the various governments, was met with derisory comment. Regional and Metro councillors were generally skeptical. "You mean I would be safer if these chemical trains flew past my house at 60 miles an hour?" asked one York Region councillor. "If you believe and support your consultant," another Metro Councillor told Task Force chairman Harold Gilbert, "then my constituents will laugh at you."

In the beginning and the absence of what he described as opposing scientific evidence, Mr. Gilbert said he had no choice but to accept the Delcan findings. And that meant, of course, that all the requests by all the Metro governments and all the community groups for speed restraint on dangerous goods rail traffic would be brushed aside.

And who was to provide this opposing scientific evidence? No one in the Task Force raised any doubt, any questions about the Delcan findings—except one,



the M-TRAC representative. On reflection, it seemed that the Delcan conclusions were unsubstantiated and illogical. But where would the countering evidence be found and would the Task Force majority accept such evidence?

The argument raised in the Task Force was that the speed report had been circulated and no countering evidence had been produced. And therefore it must be accepted. On closer examination it was discovered that the Task Force staff initially did not specifically seek countering evidence. The report was simply circulated for information purposes. It was the M-TRAC organization which sought and pleaded for outside authoritative comment.

There is a well-known authority in North America — one with a reputation of honesty, professionalism and extensive field and laboratory experience — the National Transportation Safety Board in Washington, D.C. M-TRAC asked the Board for comment. The first reaction was one of internal reluctance followed by a cautionary diplomatic warning that the Board might be seen to be interfering with an official Canadian government document.

Finally, as a public duty, the Board decided to state its views. In the most modest diplomatic language it could muster, the Board found the Delcan report “extremely superficial.” (See Appendix I).

Noting that more cars derail at higher speeds and that greater damage is likely, the Board letter added:

“We are not certain that the data is available to accomplish what this report probably intends. The best thing that could be done would be to choose a segment of railroad in Canada (or the United States) and document all accidents, with this specific relationship in mind.”

I am grateful to Mr. Gilbert that on receipt of this information, he dispatched both the Task Force Project Director and myself to Washington to confer with the Board authorities.

These authorities confirmed the contents of the Board letter and explained that because of incomplete data, the consultant had relied on faulty, deficient information; the consultant was wrong in failing to make this public. The authorities suggested further that a slow speed in high-density urban areas was beneficial since it gave both the train crew and the public more reaction time to prevent a threatening mishap. And, of course, the damage that might result from such a slow-speed mishap would be far less devastating than one at high speed. (See Appendix J).

The Project Director, Mr. Rie Kidman, later told the Task Force during a routine meeting that in his view the Delcan speed document was technically unsupportable.

Did this information have much impact on the Task Force majority? It wasn't discernible. There seemed to be a strong determination among these members that Toronto would not get a lower speed; they opposed this request on the basis that, as the majority said, the Metro rail network was safe.

Some private attempts were made to persuade me to change my position—on the basis that a lower speed for Metro Toronto would spread; that other communities would also demand a lower speed. And soon Canada would be in the same position as the United States where dozens of cities have fought and obtained lower speeds.

In his verbal presentations to the Task Force the Delcan speed consultant insisted that those U.S. cities which had obtained lower speeds had overreacted.

They were subsequently besieged by more frequent accidents. This argument was brought to the attention of the National Transportation Safety Board. Board authorities stated the consultant's statement was not in line with the facts.

Nevertheless, M-TRAC sought information from some of the U.S. cities, especially those which had lowered speeds following devastating rail accidents. (See Appendix K ). One was Livingston, La., which was hit by a huge rail accident in 1982. Fire Chief Jessie Glascock said that since the speed was lowered to 25 miles per hour, there had been no accidents over a 62-mile parish stretch.

M-TRAC also telephoned Ed Handley, general manager of the Port Terminal Railroad at Houston, Tex., which handles thousands of dangerous goods tank cars over a 320-mile rail network at 20 miles per hour, abiding by the municipal speed limit. Again no complaint about approved low speed causing major problems. In fact, the terminal now has one of the best safety records in the United States. (See Appendix L).

It appears that the fear that other municipalities may demand lower speeds is at the heart of the Task Force majority position. The fact that Metro Toronto has special problems, such as a vulnerable subway system, extensive numbers of schools near the track lying on an embankment and an acknowledged difficulty of evacuation, appear to be lost on the Task Force majority. When the temporary slowdown was instituted in 1986, one rail executive warned that slowdown demand would spread to other cities. It did not. The speed restraint in Toronto was found to be effective and beneficial for the Toronto people. It was to end in August 1988.

As I have stated previously, Task Force members were cautioned during public hearings that they would be held accountable if they failed to meet the needs of the Toronto situation. Inside the Task force this warning was simply brushed aside as an empty threat.

But I believe there is substance to this need for accountability. Who selected these people to be on the Task Force? What independent view did they provide? Is it necessary in dealing with the railways that they must be ensured of majority influence?

The weight of the vote and the weight of opinion inside the Task Force were largely on the side of the railways. The voice of the public of Toronto seemed fragile in comparison.



Montgomery Road communities bisected by high-speed chemical traffic on CP Galt Subdivision. (Photo: Rob Allen)

## V. RELOCATION DELAYED

The most obvious broader step which this Task Force should recommend is to make an immediate beginning on the long-range goal of rail relocation. Consultants spent large sums of money and much effort to conclude that relocation is feasible and would lead to sharp reduction in public risks associated with dangerous goods traffic.

That is what the Task Force was asked by the Minister of Transport: Is relocation feasible? The consultants replied that it is and it would be beneficial as a safety measure.

But internal politics diffused the relocation issue in the Task Force and the majority came down on the side of another study—a rationalization study—to decide whether relocation would make the rail industry more efficient. As for safety, said the majority, well, of course, the existing system is safe so why would you have to relocate because of safety?

Dismissed were the warnings contained in the dozens of submissions received by the Task Force. Dismissed were all the pleas at the public hearings. Forgotten were the warnings of the Canadian Transport Commission Burton-Post study of 1983 that relocation was an urgent need to reduce the existing potential for catastrophe.



Among the majority view was the supposed strategy that you may not be able to sell the federal authorities on rail relocation as a safety measure because of the costs involved. But these authorities would be more receptive if they could be convinced that relocation would bring economic benefits. So you say the existing system is safe but rationalization may entice the railways to relocate. This is an unconvincing strategy and in my view far removed from the existing need.

The risks that exist in the high-density Metro rail network point to the possibility of terrible devastation if no mitigating measure are taken. Federal bureaucrats may delay some accident reports but they cannot sweep away the convictions of the public that the risks are there, as the public perception reports indicate.

I believe the general public in Toronto understands that relocation cannot take place overnight. There must be more engineering and environmental studies and negotiations among the governments that may be involved. But a start must be made not on the basis of some long-range rationalization goal but on an urgent basis of increased safety . And if there are economic benefits as well, so much the better.

During the course of the December 1987 Guild Inn strategy meeting, Chairman Gilbert expressed support for the Parkway Belt corridor as a relocation site, mainly because the land is already in the hands of the Ontario government and this would speed completion of negotiations. More attractive sites to the far north known as the "C" options would require possible litigation and expropriation and negotiations for land purchase.

Though I worried about availability of adequate buffer zones in the Parkway area, I agreed with the Chairman that the Parkway Belt may be more practical. I



continue to be concerned about the risk such an option would produce. The importance is to reach a decision and make a beginning.

I do not agree with those who maintain that buffer zones flanking rail lines are economic wasteland. Low-density use can still be productive. It simply is a matter of safety that such high-density use as schools, hospitals, senior citizens' apartments and houses be excluded along with office towers and labor-intensive factories, especially those using toxic and explosive chemicals.

A reading of the Final Report does provide argument in favour of the Parkway Belt with the retention of the "C" area as a possible future transport corridor and a possible alternative if the Parkway Belt, for some unforeseen reason, proves impractical.

Sharing of costs will have to be worked out by the federal government with the Province of Ontario and the Metro municipalities but there is the attractive possibility that the new line could be placed under the control of a regional or terminal carrier company whose financing could be provided through a bond issue underwritten or guaranteed by the federal government.

Since both national railways would use that line and its marshalling and layover yards, revenue for the operating company could be assured through carrier charges, much in the same way as the port terminal operates in Houston, Texas. If these revenues prove inadequate, the federal government may decide it is beneficial to provide a small operating subsidy, reflecting the protection provided for the public in the over-all region.

I believe that joint use of track is an economic benefit for the country as a whole and would help provide a competitive edge for the two national railways. Shifting the dangerous goods traffic away from Metro Toronto also has a benefit

for enhanced commuter traffic, as the Task Force consultants point out, and this benefit should be considered in reaching arrangements with the Province of Ontario.

There are other benefits in relocation, including the easy adoption of safety devices, such as concrete ties and positive fasteners, advanced signalling techniques and the acceptance of higher rail speeds since the public in general will not be at risk.

Thus, as long as the zoning on both sides of the new line remains under government control and the government determines to prevent repetition of the situation which now confronts Metro Toronto, we may have found a solution which is both viable and morally responsible.

A new rail corridor could provide needed capacity that will serve CN and CP well into the next century. And it could accommodate additional traffic resulting from rail line abandonment in northern Ontario without forcing this traffic through the high-density Toronto core.

Should you agree that relocation of the CP North Toronto Subdivision is essential, there remains the problem of containing the existing risk until relocation can take place. The Task Force majority argues that the rail system is safe. But I should remind you that it takes but one accident to cause devastation. We in the Metro Toronto area have recollections of the 1979 Mississauga derailment and the others that have followed in the years since 1979. Last July we had a major derailment at Don Mills, perhaps caused in part by high speed, and we have the comment by the North York Fire Chief and Traffic Commissioner that this also might have been a catastrophe.

## **VI. A DISTORTED SUMMARY**

In the midst of preparing the final version of the Task Force Report members were confronted with a Summary produced by an Ottawa ghost-writer, hired by the Chairman on recommendation of Transport Canada.

The Summary caused me great concern since it appeared to distort the situation which exists in Metro Toronto, indicating that there is really no problem.

I was shocked by this Summary and advised the Chairman and Executive Director that I found it unacceptable. (See Appendix M). Consultants had warned the Task Force that a serious risk existed on the North Toronto Subdivision and on parts of the York Subdivision. These risks were not reflected in the Summary.

Indeed, the Summary stated that relocation of the dangerous goods traffic in Metro Toronto was not necessary on the basis of safety alone. It found no need for moderate speed which had been so widely requested by the Metro and other municipal governments.

It gave the impression that all was well and that the people of Toronto were fortunate to have one of the safest railways in the world. These statements seemed to obliterate to what the Task Force members had been told by their own consultants. And while the Task Force was spreading this message, the National Transportation Agency was reporting that Canadian derailments and collisions had increased in the first half of 1988 over the similar period of 1987.

When you consider the estimate by Concord Scientific Corp. that as many as 11,000 people might be killed in a chlorine tank car breach during a North Toronto derailment and that many thousands could be affected by jet fires and fireballs and other major consequences resulting from an accident involving dangerous goods, you are left with the impression that the Summary is nothing more than a piece of tainted propaganda.

The fact that the North Toronto Subdivision lies on an embankment and runs through a very narrow corridor flanked by institutions, fixed-plant chemical installations and high-density residential complexes was ignored in the Summary.

There was no mention of the difficulties Toronto would experience if a major evacuation became necessary. It made no mention of the warnings of the 1983 Burton-Post Report that the potential for a major catastrophe existed in Toronto and that rail relocation was urgently needed.

I found the Summary to be a travesty. The fact that this Summary is likely to be widely distributed and widely read dignifies its stature in a manner which it does not deserve.

Where Task Force consultants estimated that relocation would reduce existing risk in Toronto by as much as 75 per cent, the Summary states that none of the relocation options would achieve dramatic lower levels of safety. How could the majority of the Task Force endorse such a statement? Yet the Executive Director stated that six out of the seven members did readily endorse the document which I believe is an injustice to the many thousands of people at risk in the Metro area.

Had this dubious document even expressed a specific concern for those at risk, it might have found some degree of acceptability. It raises the question in

the public's mind whether it was designed to give the government an opportunity not to take any action on relocation and still be able to argue that there is no problem in Toronto.

Whatever speculation is entertained, there is no doubt there is a problem in Metro Toronto and that the consultants hired by the Task Force had outlined the problem in sufficient detail to cause alarm and to warrant a search for solutions in the quickest manner possible.



100-ton chemical tank car speeds past downtown Toronto storage yard with flammable and explosive products.





## **VII. TECHNOLOGY ENDORSED**

While the tone of the Task Force Summary may disappoint the public, there are some recommendations which undoubtedly will be widely supported. These deal with developments in railway technology, particularly the Advanced Train Control System.

Task Force members travelled and witnessed what CP Rail had developed in Calgary and I agree with the majority of the Task Force that this kind of system, with its central control over train speeds and train movements, may be helpful in the reduction of such disasters as the one at Hinton, Alta., which took 23 lives and which caused so much suffering and damage.

Other technological improvements, such as concrete ties and safety audits as well as drug and alcohol control, would be beneficial. But the government and the general public must realize that according to the consultant, Cole, Sherman Transmark Inc., all the technological improvements available applied to the existing system will only reduce the present risk by no more than 10 per cent. The price tag is estimated at \$400 million.

You have to judge whether the money would be better spent in the construction of a relocated rail line where buffer zones can also be incorporated. I say this is a matter of judgement, although any reduction in risk should be seized upon for the purpose of lessening the possibility of accidents.

Concrete ties, for example, cause increased noise and vibration and thereby would increase public annoyance. Some reduction in risk can be attained by using positive fasteners on hardwood ties. This also should be explored. It is clear there is much room for research and development in the rail industry to make operations safer. These gains would benefit the entire country, including Metro Toronto. I particularly commend CN Rail for its impressive research undertakings in the Montreal plant. I believe these research efforts should be given every encouragement.

But it is also clear that much of the research and development relating to rail safety is not centrally co-ordinated. The federal government should see to it that some central co-ordinating body is established to make research more productive and perhaps less expensive.

A 'regulatory void' has been identified by the Railway Transport Committee concerning weld specifications for tank cars. My technical advisers are disturbed that unsafe tank cars carrying dangerous goods may be passing through Toronto. I would urge you to give this matter your closest attention. (See Appendix N).

I endorse the concept of a Canada-United States commission or agency to co-ordinate safety measures on both sides of the border. I know the National Transportation Safety Board in Washington would welcome such a step and as the Minister is aware, the Canadian Transport Commission also favours such transborder co-operation.

The adoption of many of these peripheral recommendations will enhance rail safety in a general way, but the people of Toronto will recognize that such steps will not solve the situation locally. Strong action must be taken to moderate the speeds of dangerous goods rail traffic inside Metro while activity is intensified towards eventual railway location.

The Task Force shied away from studying the impact of cabooseless operations on rail safety but the Metro government expressed concern. Metro Toronto wants the caboose retained on dangerous goods traffic in the Metro area and I fully support this request. It is not a question of discouraging technology. But in the case of the caboose, I note the December 1987 Decision of the Canadian Transport Commission that cabooseless operations may add to the existing risk, although not significantly. Every added risk, however small, simply escalates and worsens a situation which has already reached a stage of public intolerance.

Cabooseless operations may be seen by the federal government as another means of maintaining competition with American railroads through reduced costs. But if you have more accidents, the savings disappear.

It does not follow that the caboose should be retained on all trains. But in the case of Metro Toronto, where the risks are very high, retention of the caboose makes good sense.



Freight train passes chemical plant in congested East York industrial area enroute to CP Agincourt yard.



### VIII. A PROBLEM IN ETHICS

Many professions have difficulty in reconciling primary responsibilities. For example, the Association of Professional Engineers of Ontario recently grappled with what the Association calls 'whistleblowing'. This involves a possible split in moral obligations to the client and obligations to the general public. The Association rightfully concluded that the overriding responsibility of all professional engineers must be to the general public.

Many commissions and other bodies have grappled with the problem of how to serve the needs of the over-all national community in relation, for example, to the needs of a local community.

People in Toronto look to the federal government to help overcome a rail problem which to a large extent was initiated through federal approval. In forming the Task Force dealing with this issue, there was undoubtedly great care in selecting the members. But there have been questions among the public whether the members were selected with a balanced view to resolving the specific issues in Toronto.

Of all the members selected, I was the only one residing in the affected area. I represent a large number of community associations but I am not an elected member of the Metro government or any other municipal government. It is true that many of these municipalities leaned on me for support but I had no specific authority to make decisions on their behalf. In contrast, the railways had strong support inside the Task Force. They held the majority view and the majority view

of the rail industry does not necessarily coincide with the needs of the Toronto public.

Therefore, the moral obligations of the individual member comes into play. It comes down to a matter of personal accountability.

How, then, can each member of the Task Force be held accountable for personal decisions in relation to each industrial interest and the pleas of the general public? In dealing with the Mississauga derailment of 1979, Mr. Justice Samuel Grange noted that rail management has an obligation to shareholders but the federal authority has an obligation to the general public.

The Professional Engineers of Ontario rightfully concluded that no matter what obligations engineers have undertaken to their clients, the greater obligation is to preserve the safety of the public. Engineers could speak out and warn the public if they felt that something was wrong, even though these declarations would not be beneficial to the clients.

There is a greater good and a greater obligation in dealing with matters which affect large numbers of people, especially people who are unable to speak for themselves or to influence decisions which have direct impact on their lives.

The people of Toronto did not ask that CP Rail establish a double-track dangerous goods rail line in the midst of the heaviest population density in all Canada. The people did not ask the railways to move such dangerous goods at high speeds in the narrow corridor currently used. The risks were simply imposed on the public through federal authority. Accidents have occurred, including the Mississauga derailment that forced evacuation of almost one-quarter million people as chlorine and propane tank cars erupted.



During the course of the Task Force deliberations, some accidents took place in the Metro area. These were not fully explored by the Task Force. Indeed, a derailment which took place at Don Mills on July 14, 1987, drew little attention in the Task Force although the accident involved three locomotives and 31 cars and raised heavy anxiety in the City of North York.

Almost a year later, there was still no federal report on the results of the Don Mills investigation (See Appendix O). Many community groups questioned whether the government was really doing anything to increase rail safety in Metro Toronto. There seemed to be no response from Ottawa other than to refer to the fact that the Task Force existed.

As a member of the Task Force, I have a duty to the Minister of Transport who appointed me but I believe I have an obligation to the general public which looks to me for means of overcoming a long-festering problem. I believe I have met my obligations in this minority report.



Drums of chemicals stored at paint manufacturing plant near CN West Toronto Yard. (Photo: Rob Allen)



## **IX. DOES THIS GOVERNMENT CARE?**

Finally, the point must be made in this report whether this federal government really cares about the public of Metro Toronto.

Last winter, Employment and Immigration Minister Barbara McDougall maintained that it does. In a letter to a Toronto newspaper published Feb. 13, 1988, she maintained that Toronto, more than any other region, "has benefitted from our government's economic and social policies." Mrs. McDougall supports speed restraint on Metro dangerous goods traffic.

Many community groups in Metro Toronto are convinced that the government in fact has turned its back on Metro's rail problem and that the difficulty over speed restraint in the Task Force had its roots in Ottawa policy.

It is true that without Mr. Mazankowski's action, there would have been no Task Force. It is also true that the Conservative Toronto caucus assisted in making this Task Force possible. But there were forces inside the Conservative party which did not want to see this Task Force emerge.

The public of Toronto must therefore be grateful to the Ottawa administration for approving the expenditure of some \$2 million, much of which went to the consultants.

Without these studies and investigations we would not have been able to verify that some 80 per cent of the dangerous goods traffic in Metro Toronto does not originate in Metro and does not terminate there. The CP Metro corridor is largely a rail "through" route, convenient for the carrier in transporting these chemicals to and from other places in Canada and the United States.

The people of Toronto simply bear the burden of the risk.

And who allowed this risk to develop? It was encouraged by policies of previous federal governments. For about 20 years the people of Toronto appealed for speed restraint and other measures to reduce the risk. Successive federal governments found reason to turn a blind eye.

Of course, local zoning officers also are to blame for allowing development in some places right up to the track. Now, the City of Toronto has recognized the urgent need for a buffer zone and has initiated a new interim policy blocking all new development within 50 metres of the railway right-of-way.

We have to say this much now: Mr. Mazankowski understood what had taken place. He expressed regret that he had not dealt with the problem when he was Minister of Transport in the Clark government and he expressed determination to resolve the problem once and for all when the Mulroney government came into office.

So we are grateful to Mr. Mazankowski for establishing the Task Force and we are grateful to you, Mr. Bouchard, for reaffirming your support. The question remains: where do we go from here?

The people of Toronto are looking to you for help. It is not a matter of interfering with the economic viability of the railways; it is a matter of the

government expressing its concern for the lives of Toronto people, especially the many children whose schools lie near the track.

One possible solution is simply to ban all dangerous goods from the CP North Toronto Subdivision. Such a proposal has been heard in Toronto but in my view it does not solve anything. Under existing track structures it would mean transferring the chemical cargoes onto some other track and possibly to other dense population areas.

As long as the CP classification yard remains in Agincourt, there will be heavy movement of dangerous goods on the North Toronto Subdivision. Until relocation of the line takes place, thousands of Toronto people will continue to bear the existing risks. Do they not deserve some sympathetic response from you? Should this government not make good its promise to restrain the speed of these dangerous goods trains until a more lasting solution is found?

The feeling in Toronto that the federal government doesn't really care was reflected in part in the manner in which Toronto community groups reacted to Task force consultant reports issued on December 1, 1987. A number of community leaders described the perception and speed reports as "whitewash" and urged me to leave the Task Force.

In fact, I discussed the reaction with the Task Force Chairman and he urged me to remain. I received similar advice from Toronto aldermen and from officials in the Ontario government. Participating in Task Force meetings with Regional and Metro governments and hearing the repeated ridicule heaped on the speed and perception reports, I finally concluded that I might be forced to write a minority report.

It was at the Scarborough Guild Inn strategy meeting of the Task Force in December 1987, where I found the situation had become intolerable. I stated that I would have no alternative but to voice the needs of the Toronto public. One member of the Task Force urged the Chairman not to be concerned since, as he stated, "no one reads minority reports." It should be a matter of record that this person was designated as representing "the public at large."

Then came the attempt to oust me from the Task Force with one railway representative suggesting I be thrown out since I would not agree with the majority view and his move was supported by another member, also representing "the public at large."

The Chairman declined to entertain the matter any further and the ejection move was dropped.

Had the Task Force been constituted with a different membership that kind of humiliating action would not have taken place. It is my conviction that the Task Force majority contained members who were more concerned with industrial interests than in the needs of the general Toronto public.

The public must now look to the federal government for an expression of concern and for action that will alleviate the risks which have been defined in the Task Force consultants reports. A lower speed will reduce the risks of excessive damage in dangerous goods derailments. This is a relatively small request in the light of the possible costs of a serious accident. Relocation of the line is essential but it will take time. Some action must be taken immediately. I ask you to demonstrate that this government really cares.





Mile-long chemical train crosses busy Yonge Street and TTC subway line at Summerhill Avenue. (Photo: Rob Allen)



## APPENDICES











Transport  
Canada

Transports  
Canada

Toronto Area  
Dangerous Goods  
Rail Task Force

Groupe d'étude du  
transport par chemin de fer des  
marchandises dangereuses dans la  
région de Toronto

Chairman  
Harold F. Gilbert

President  
Harold F. Gilbert

Executive Director  
E. J. (Ted) Legg

Directeur exécutif  
E. J. (Ted) Legg

4900 Yonge Street  
Suite 200  
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M2N 6A5

Telephone: (416) 224-4612  
Telex: 06-986553

February 8, 1988

Mr. Harold Morrison  
Chairman  
Metro Toronto Residents'  
Action Committee (M-TRAC)  
181 University Ave., Suite 1202  
Toronto, Ontario  
M5H 3M7

Dear Harold:

I refer to our conversation of February 4, 1988 when you stated, as a Member of the Task Force (referred to as the Toronto Area Rail Transportation of Dangerous Goods Advisory Council), that you intended to write a "minority report" and requested payment for the preparation and completion of this report as well.

DID NOT ASK FOR ANY PAYMENT  
- H.M.

As mentioned to you, as Chairman, I am not prepared to accept a "minority report" as part of my report to the Minister.

My decision, not to accept a minority report, is based on the Terms of Reference under which the Advisory Council came into existence. In particular, I refer to Section 10, entitled Reporting, and I quote:

"The Chairman of the Council shall report to the Minister with respect to work of the Council within six months after the establishment of the Council and thereafter at intervals of six months until a final report is submitted."

As I have stated on a number of occasions, the Minister, when he set up the Advisory Council, recognized that the people named to the Council represented a broad area of interest in Rail Transportation - with, in some cases, very divergent views in regards to Rail Safety.

Throughout the life of the Task Force, I, as Chairman, have attempted to give every member an opportunity to express these views.

I, as Chairman, am now required under the Terms of Reference to report to the Minister on our findings. This of course is what I intend to do.

.../2

It is further understood, and I have stated so a number of times, that I am obligated to reflect your views, and those of the other Members of the Task Force, in my report to the Minister. The Minister will receive this Report and will then decide the action(s) he wishes to take.

Harold, in closing, I think the Task Force has worked very well together. In fact, as Chairman, I have been privileged to work with a very fine group of experts. At the same time, and I think the Task Force Members would agree, I, as Chairman, have ensured that all Members have had a full and ample opportunity to state and debate their views with other Members.

I am confident, in my Report to the Minister, that the Task Force Members will be satisfied that their views will be made known to him.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "Harold Gilbert", with a long, sweeping horizontal line extending to the right.

Harold Gilbert  
Chairman

# M-TRAC

for rail safety

METRO TORONTO RESIDENTS' ACTION COMMITTEE

181 University Avenue, Suite 1202, Toronto, Ontario, M5H 3M7

Telex 065-24481

Phone (416) 365-0301

Personal-via courier

February 9 1988

Mr. Harold F. Gilbert  
Chairman  
Toronto Area Rail Transportation of  
Dangerous goods Task Force  
4900 Yonge Street Suite 200  
willowdale Ontario M2N 6A5

Dear Mr. Gilbert:

Task force Report to the Minister

As you have been made aware, I will not be able to subscribe to a report to the Minister which denies the appeal of the Metro governments and the communities representing the Metro people for a slowdown of the dangerous goods rail traffic which presents a significant risk for some 600,000 residents and schoolchildren near the track.

Even with thebest of intentions, relocation of the CP North Toronto Subdivision will take many years to accomplish, perhaps a decade or more. The current slowdown which expires next August has proven safe. To escalate that speed on the basis of insufficient scientific evidence introduces the intensified possibility of multiple fatalities in the event of a serious derailment. The statistical possibility of a chlorine plume taking a toll of more than 11,000 deaths is too horrendous to contemplate. Every measure must be taken to contain the risk. Speed reduction is a valid measure of containment.

We have been warned by the speed consultant that each escalation of speed brings with it the possibility of an increase in the number of chemical cars which may be breached during a derailment. It is widely accepted that the amount of damage resulting from a derailment increases with the speed of the train.

It therefore may be necessary for me to write a Minority report, to inform the Minister of Transport, Mr. Crosbie, of these and other views and to seek his sympathetic response. I would hope in that event that you will provide me with the opportunity to produce such a report, along with facilities for publication and distribution.

I hold the highest respect for your personal integrity, your concern for the public and your skill and dedication during these months of work on the Task Force. The public of Toronto does not wish to interfere with the economic viability of the railways but it has the natural right to seek protection until the risk can be removed.

Yours sincerely,



Harold Morrison.











Municipality of Metropolitan Toronto Council



**Metropolitan Clerk's Department**

City Hall, Toronto, Ontario, Canada M5H 2N1  
Telex: 06-23472      Fax: (416) 392-2980  
Telephone:



**Daniel Crombie**, *Metropolitan Toronto Clerk*  
**Novina Wong**, *Deputy Metropolitan Clerk*

Reply to the  
attention of:

**Certified to be a true copy of Clause No. 5 of Report No. 1 of The Transportation Committee, headed "Transportation of Dangerous Goods by Rail Within the Metropolitan Toronto Area, as adopted by the Council of The Municipality of Metropolitan Toronto at its meeting held on February 2 and 3, 1988.**

**5**

**TRANSPORTATION OF DANGEROUS GOODS BY RAIL  
WITHIN THE METROPOLITAN TORONTO AREA.**

**The Transportation Committee recommends:**

- (i) that the Council of Metropolitan Toronto, in conjunction with the six Area Municipalities (Cities of Etobicoke, York, North York, Toronto, Scarborough and the Borough of East York), forward the following position to the Federal Task Force concerning the transportation of dangerous goods within the Metropolitan Toronto area:**
  - (1) that the Federal Government make an immediate decision to relocate (remove) dangerous goods rail traffic presently using the CP North Toronto rail corridor to a new rail corridor outside of Metropolitan Toronto. In this regard, the preferred new route is the C3 option of the Northern Line alternative;**
  - (2) in the event the Federal Government decides that it cannot proceed with such a project at the present time, then a commitment should be made to protect a future new rail corridor outside of Metropolitan Toronto. In this regard, the preferred new route to be protected should be the C3 option of the Northern Line alternative;**
  - (3) in the interim, substantial efforts should be made by the Federal Government to:**
    - (a) institute into federal legislation a 40 kilometres per hour (25 miles per hour) maximum speed limit for trains or residue cars carrying dangerous goods or commodities within Metropolitan Toronto, and that appropriate monitoring and enforcement of train speeds be undertaken;**
    - (b) retain cabooses on trains transporting dangerous goods or commodities through the Metropolitan Toronto area;**
    - (c) further examine and implement operational and safety improvements which do not require extensive capital funding on existing rail corridors within Metropolitan Toronto;**
    - (d) advise municipalities what actions will be undertaken and how these actions are intended to reduce risks;**

- (e) effectively monitor rail safety and operational improvements, as well as any new rail regulations to be implemented to determine whether they will be beneficial;
  - (f) co-ordinate the development of policies and procedures for emergency preparedness so that municipalities have the resources, experience and ability to deal with dangerous goods rail disasters;
  - (g) assume the responsibility for funding municipal emergency response programs, particularly towards offsetting resource costs (personnel, equipment, etc.); and
  - (h) provide more information to the public pertaining to the risk of dangerous goods shipments by rail and steps that are being taken to minimize this risk; and
- (ii) that the Federal Government be requested to consider the relocation of the CPR Agincourt Yard to a location where such an operation will have no adverse impact on any population centres and which will facilitate the interchange of traffic between the CP and CN lines.

The Transportation Committee reports having requested the Metropolitan Chairman to arrange a special meeting with the Toronto Area Rail Transportation of Dangerous Goods Task Force in order that the Metropolitan Chairman, Members of the Transportation Committee and appropriate Metropolitan Officials may present the Metropolitan Council's position with respect to this matter.

The Transportation Committee submits the following report (December 21, 1987) from the Commissioner of Roads and Traffic:

#### Recommendations

It is recommended that the Council of Metropolitan Toronto, in conjunction with the six Area Municipalities (Cities of Etobicoke, York, North York, Toronto, Scarborough and the Borough of East York), forward the following position to the Federal Task Force concerning the transportation of dangerous goods within the Metropolitan Toronto area:

- (1) that the Federal Government make an immediate decision to relocate (remove) dangerous goods rail traffic presently using the CP North Toronto rail corridor to a new rail corridor outside of Metropolitan Toronto. In this regard, the preferred new route is the C3 option of the Northern Line alternative;
- (2) in the event the Federal Government decides that it cannot proceed with such a project at the present time, then a commitment should be made to protect a future new rail corridor outside of Metropolitan Toronto. In this regard, the preferred new route to be protected should be the C3 option of the Northern Line alternative;
- (3) whether or not an immediate decision is made regarding the construction of a new rail corridor, substantial efforts should be made by the Federal Government to:
  - (a) further examine and implement operational and safety improvements which do not require extensive capital funding on existing rail corridors within Metropolitan Toronto;

- (b) advise municipalities what actions will be undertaken and how these actions are intended to reduce risks;
- (c) effectively monitor rail safety and operational improvements, as well as any new rail regulations to be implemented to determine whether they will be beneficial;
- (d) co-ordinate the development of policies and procedures for emergency preparedness so that municipalities have the resources, experience and ability to deal with dangerous goods rail disasters;
- (e) assume the responsibility for funding municipal emergency response programs, particularly towards offsetting resource costs (personnel, equipment, etc.);
- (f) provide more information to the public pertaining to the risk of dangerous goods shipments by rail and steps that are being taken to minimize this risk;
- (g) institute into federal legislation a 40 kilometres per hour (25 miles per hour) maximum speed limit for trains carrying dangerous goods or commodities within Metropolitan Toronto, until further analysis is undertaken which disproves the consequences of the risks associated with higher train speeds; and
- (h) retain cabooses on trains transporting dangerous goods or commodities through the Metropolitan Toronto area.

#### Introduction

At a special meeting of the Metropolitan Transportation Committee held on Monday, December 7, 1987, the Chairman and the consultants of the Toronto Area Rail Transportation of Dangerous Goods Task Force (Federal Task Force) gave a slide presentation and oral report on the results of the investigations for the transportation of dangerous goods in the Greater Metropolitan Toronto Area.

This consultative session was part of Phase II of the Federal Task Force's "public consultative program" held during December, 1987, and January, 1988, to provide information to the public and their elected representatives in the greater Metropolitan Toronto area and to provide the opportunity to comment on the findings of the consultants commissioned by the Federal Task Force. The Federal Task Force has requested that public and municipal comments be submitted early in January 1988, since the Federal Task Force has a mandate to present its recommendations to the Federal Minister of Transport by March, 1988.

The Federal Task Force requested that it would be preferable if Metropolitan Toronto submitted its comments together with the area municipalities as a joint response. This report has been prepared on this basis.

#### Background:

##### (1) Federal Task Force:

The Federal Task Force was established by the Federal Minister of Transport basically to assess alternative routes and operating strategies that would reduce the level of risk for the rail movement of dangerous goods through the greater Metropolitan Toronto area.

The Greater Metropolitan Toronto Area is defined to include the Regional Municipalities of Durham, York, Halton and Peel, and The Municipality of Metropolitan Toronto. Five regional governments and some 30 municipalities are involved, emphasizing that the problem does not belong to any one particular location but rather affects the whole area.



(a) Terms of Reference

On March 14, 1986, the Federal Minister of Transport commissioned the Federal Task Force to:

- (i) determine the feasibility of rerouting or relocating the rail flow of dangerous commodities away from densely populated areas in the Greater Metropolitan Toronto Area;
- (ii) examine ways and means of improving safety on both the existing railway system as well as on any feasible rerouted or relocated option; and
- (iii) examine the matter of speed limits on trains containing special dangerous commodity cars.

Although an examination of feasible alternative routes was undertaken, the Federal Task Force has no mandate for implementing any of its findings (i.e. constructing a new route or implementation of operational changes).

(b) Task Force Members:

The seven members are: Mr. Harold F. Gilbert (Chairman); Mr. Glenn Swanson, V.P., CP Rail; Mr. Brandon Buchanan, Assistant General Superintendent, CN Rail; Mr. Harold Morrison, M TRAC Chairman; Mr. Robert Maksymec, President, Planmac Consultants Ltd; Mrs Anne Clark, Esso Petroleum Canada; Mr. Richard Puccini, Executive Director, Municipal Planning, Ontario Ministry of Transportation. Both Mrs Clark and Mr. Maksymec represent the public at large.

(c) Studies:

The Federal Task Force commissioned eight consulting firms to work together on various aspects of the problem. A list of technical studies and a brief description of their terms of reference is appended as Exhibit 1.

(2) Previous Metropolitan Council Involvement:

- (a) Clause No. 1 of Report No. 17 of The Transportation Committee (1986), as adopted by the Council of The Municipality of Metropolitan Toronto at its meeting held on January 20, 1987:

This report embodies a joint response by The Municipality of Metropolitan Toronto and its six Area Municipalities to the Federal Task Force, requesting that dangerous goods rail traffic on the CP North Toronto rail line be relocated to a newly created line outside of Metropolitan Toronto, that trains transporting dangerous goods be limited to a 40 kilometres per hour (25 miles per hour) speed limit, and that monitoring strategies and regulations involving train traffic carrying dangerous goods be improved to minimize the level of risk to the public. This report is appended as Exhibit 2.

- (b) Clause embodied in Report No. 22 of The Metropolitan Executive Committee, as adopted by the Council of The Municipality of Metropolitan Toronto at its meeting on September 16, 1986:



This report reconfirms previous Metropolitan Council positions that the rail flow of dangerous goods be relocated outside of Metropolitan Toronto and away from densely populated areas and is appended as Exhibit 3.

- (c) Clause embodied in Report No. 13 of The Transportation Committee, as adopted by the Council of The Municipality of Metropolitan Toronto at its meeting held on October 25, 1983:

This report requests that in addition to improving rail safety practices and regulations in general, the Railway Transport Committee proceed forthwith to find and implement a new rail route to be constructed for transporting dangerous goods, as suggested by the "Burton-Post" report. This report is appended as Exhibit 4.

Comments:

(1) Methodology:

The studies undertaken by the Federal Task Force appear to be structured in order to address the following question:

Given that the level of risk can be decreased in some proportion to increasing levels of investment (i.e. in physical plant, land use protection, operational techniques, etc.), what level of risk is considered to be acceptable and what level of investment can be justified to attain this level of risk?

It should be noted that although the work of the Federal Task Force is focussed on the Greater Metropolitan Toronto Area, the Federal Minister of Transport will no doubt be considering the implications of any final decision for this area in terms of potential application to other major urban centres in Canada. In other words, the financial implications for the Federal Government may go beyond the investment required just for the Greater Metropolitan Toronto Area.

(2) Routes and Operational Strategies:

The analytical process employed by the Federal Task Force reduced the number of basic rail corridors under study from a long list of six corridors to three corridors for more detailed study. These corridors, roughly illustrated in Exhibit 5, are:

**Corridor A:** The existing system, in which CP dangerous goods traffic moves east-west through the middle of Halton and Peel Regions, midtown Metropolitan Toronto and south Durham Region; and CN traffic moves through north Halton and Peel, south York Region (just north of Steeles Avenue) and south Durham Region.

**Corridor B:** The Parkway Belt, within which both CP and CN traffic (dangerous goods and possibly all through freight traffic) would be located. This corridor would utilize existing CN and CP lines, as well as new sections of line where bypasses are provided and where lines of the two railways cross each other. The Parkway Belt was established as a transportation/utility and open space corridor by the Provincial Government on an east-west alignment north of Mississauga and Metropolitan Toronto.

**Corridor C:** The Northern Line, a new rail line which would follow a more northerly alignment through North Halton and Peel, York Region, and north and south Durham Region. The new rail line would be located generally north of major existing and planned urban development.

A number of rail operating strategies were then developed for each corridor and evaluated in terms of safety, community, natural environment, and economic impacts. This resulted in a total of twelve rail route/operating alternative strategies, as defined in Exhibit 6.

A review of the rail route/operating alternative strategies identified in Exhibit 6 makes it obvious from a Metropolitan Toronto perspective that while it would be desirable to relocate CP North Toronto dangerous goods rail traffic to another route, this traffic should not be rerouted to the CN Halton/York rail corridor (Alternative A2). The Parkway Belt corridor alternative options (B1A to B3B) make use of existing CN Halton/York rail segments and this would do little to reduce the risk concerns of the City of North York and the nearby municipalities in the Region of York. The Northern Line corridor alternative options (C1 to C3) appear to be the best investment in terms of lower levels of risk, land use protection, providing better operations to the railways, and accommodating future railway capacity requirements.

Hence, based purely on Metropolitan Council's previous position, Corridor C is the only alternative consistent with this position.

**(3) Societal Risk:**

The analysis of societal risk, summarized in Exhibit 7, concluded the following:

**(a) Corridor A - Existing System:**

- (i) There is a societal risk of 4.1 fatalities per year (or about 40 every ten years or 400 fatalities likely every 100 years, etc.) on the present rail system (rail lines and yard facilities) within the Metropolitan Toronto region due to the transportation of dangerous goods;
- (ii) the predominant risk (i.e. higher level of societal risk) exists on the central segments of the CP North Toronto (14 per cent. of total societal risk for the region) and CN Halton/York (11 per cent. of total societal risk for the region) rail corridors due to the high density residential development adjacent to the tracks, the tracks being on an embankment for most of the route, almost no existing buffer zone, a major accessibility problem, and a major concern over evacuation;
- (iii) rerouting only CP North Toronto dangerous goods rail traffic to the CN Halton/York line (immediately north of Steeles Avenue) reduces the CP North Toronto central rail segment risk by 97 per cent. but increases the CN Halton/York central rail segment risk by 41 per cent.; and
- (iv) with technological improvements (new tracks, improvements to signals, etc.) provided for the existing system, the baseline societal risk would only be reduced by 10 per cent.

(b) Corridor B - Parkway Belt:

- (i) Relocating only CP North Toronto dangerous goods rail traffic to this corridor would reduce the risk on the central segment of the CP line by 97 per cent. and reduce the overall societal risk of the rail network by 40 per cent., but the central high risk segment of the Parkway Belt would be increased by 41 per cent.; and
- (ii) overall risk is not reduced greatly by this corridor because corridor alternative options make use of the existing CN Halton/York rail line where specific restrictions exist.

(c) Corridor C - New Northern Line:

- (i) Relocating only CP North Toronto dangerous goods rail traffic to this new rail corridor would reduce overall societal risk of the rail network from 4.1 to about 1.1 fatalities per year or a 73 per cent. reduction. More significant, however, is the 97 per cent. reduction in the level of risk in the central rail segment of the CP North Toronto line; and
- (ii) relocation of CN Halton/York dangerous goods rail traffic to this new corridor would reduce overall risk by 95 per cent. on the existing central rail segment of this line.

Based on these facts, the new Northern Line appears to be the best alternative in terms of reducing average risk and also significantly reducing the present high risk sections of the CP North Toronto and CN Halton/York rail lines.

The consultants used the approach that the loss of life measurement can be viewed as a surrogate for all impacts of a rail accident including sub-lethal impact effects. To place these levels of risk in perspective, the consultants compared such risks with other inherent risks in daily life (see Exhibit 8).

(4) Questions Regarding Analysis:

(a) Calculation of Risk:

Concerns with the methodology used by the Federal Task Force consultants are:

- (i) No projections were made of the overall growth of rail traffic, the effect on the risk of dangerous goods traffic was considered as marginal, and new dangerous goods that may come to the market in the future was not considered. The absence of these projections implies that the calculated absolute value of risk is underestimated and perhaps the relativity of risk values between options is skewed.
- (ii) The risk analysis estimates only potential fatalities from immediate exposure to the hazards and does not consider sub-lethal impacts, such as:
  - number of injuries
  - property damage
  - other effects (e.g. contaminated soil, etc.)
  - long-term health effects and costs
  - municipal costs.

The absence of this information makes it difficult to assess the true worth of reducing societal risk.

Examples of these are as follows:

- |                        |   |
|------------------------|---|
| Round Rock, Texas      | - December 14, 1987   |
|                        | - evacuation of whole town (5,000 people)   |
|                        | - environmental damage  |
|                        | - \$ cost not available   |
| Mississauga, Ontario   | - November, 1979  |
|                        | - no lives lost; \$138 Million cost (estimate)  |
|                        | - most of city had to be evacuated  |
| Hinton, Alberta        | - February, 1986  |
|                        | - 23 lives lost; \$15 Million cost  |
|                        | - environmental damage  |
| Livingston, LA, U.S.A. | - 1982  |
|                        | - 19 buildings destroyed  |
|                        | - considerable environmental damage (contaminated soil along a three mile corridor had to be removed) |
| Other examples:        | - Cambridge, Ontario  |
|                        | - Parry Sound, Ontario  |
|                        | - Don Mills, Ontario (July, 1987).  |

- (iii) The risk associated with rail transport of dangerous goods should also be compared with other modes of transport.
- (iv) The average "system societal risk" figure established masks the specific effect of the high risks that exist on specific segments of rail corridors, such as through the central area of Toronto on the CP North Toronto line

Other aspects that appear to have been excluded in the consultants' analysis are:

- o the consequences of non-dangerous goods, such as lumber or box cars, can be just as dangerous in a derailment should these cars strike a hydro tower, hydro sub-station (where PCB's may be involved), or propane tank facilities near trackside;
- o the risk associated with chemical residue (empty tank) cars, where two to five per cent. of the original contents usually remains after discharge, which in some cases results in the car becoming pressurized with a potential explosive gas should an accident occur;
- o the consequences of a "chemical soup" situation, the combination of major chemicals such as propane and chlorine, which can result in different chemical mixtures that must be contained by emergency forces;



- o the problem with commodities such as acetates, and the consequences when this chemical is mixed with other dangerous goods; and
- o the problem with leaking cars (CP, for example, had to deal with 217 leaks across Canada last year).

(b) Costs:

The cost of land and physical plant for the three corridor alternatives, illustrated in Exhibit 9, range from \$0 for the "do nothing" alternative in the existing system to a high of \$1,686 million for the C2 option of the Northern line alternative.

There are certain questions pertaining to the cost estimates provided:

- (i) certain rehabilitation costs on the existing system may be avoidable. Infrastructure costs, such as the replacement and major maintenance of about 50 bridges are not included in the analysis. The replacement cost of these works ranges between \$250-300 million, and improvements must be undertaken if rail traffic continues within the 20-50 year analysis period that was considered by the consultants. Ultimately, the railways must make these improvements and it may be possible that the \$250-300 Million cost associated is avoidable if parts of the CP North Toronto rail line can be abandoned in the Corridor C options; and
- (ii) given that rail traffic will increase, a new rail corridor will provide the opportunity for future expansion. However, if the capacity of the existing system has to be increased to accommodate traffic increases, the retrofitting of an existing line can be proportionately more expensive than providing some additional capacity with a new rail line. Hence, this factor should be taken into account when making comparisons with new rail corridor alternatives.

In the cost factors analyzed, no mention is made of the costs related to municipal expenses for preparation of emergency services required for a rail accident. The consequences will vary in terms of the density of development adjacent to a rail corridor. However, the municipal cost associated with a dangerous goods rail accident within the central area of Metropolitan Toronto, such as on the CP North Toronto line, could be substantial. The Task Force Consultants estimate the cost of a Mississauga accident at Yonge and Summerhill might be five times what it was in Mississauga (estimated at \$138 Million), assuming that the chlorine was lifted and dispersed at high levels above ground by the propane fires as actually happened in Mississauga. The cost of the same accident at Yonge Street and Steeles Avenue could be two to three times higher what it was in Mississauga.

And lastly, the capital cost associated with the relocation of rail traffic involving dangerous goods and the creation of a new rail corridor should be compared to the costs of other major federal and provincial initiatives and projects in order to assess the relative magnitude of the required investments.

(c) Public Perception Survey:

There are uncertainties with the public survey that purported little support for shifting transport of dangerous goods outside the Metropolitan Toronto area. Had a survey sample been undertaken of people residing in close proximity to specific segments of rail corridors within Metropolitan Toronto (i.e. along the CP North Toronto line within the central area of Toronto), then a higher percentage of respondents would have favoured relocation of dangerous goods rail traffic because these people would be more aware of the problem and risk.

(d) Train Speeds:

Previous submissions to the Federal Task Force by Metropolitan Toronto, the City of Toronto and other municipalities raised the issue that the speed of a train at the time of the derailment can be a contributing factor to the severity of the accident.

The Federal Task Force consultants' findings agree with this. Yet they postulate that trains are actually less prone to having accidents in the 35 to 45 miles per hour range than at lower speeds. This relationship based on speed/accident incidents may be acceptable on a national basis but may not be representative when the special conditions of the CP North Toronto line (i.e. terrain, embankment, high density development, etc.) and the cargos (dangerous goods/commodities, train length, etc.) being transported are taken into account. The location within Metropolitan Toronto where an accident may occur and the type of dangerous goods involved are factors which can contribute to the consequences of an accident.

Sensitivity analysis undertaken by the Federal Task Force consultants revealed that, in the event of a rail accident, a rail car could be catapulted as far as 120 feet from the rail line when the rail line is located on flat terrain. The consequences when the rail line is on an embankment, as is the case for the CP North Toronto and CN Halton/York lines, would be severe.

Until further analysis is undertaken which disproves the consequences of the risks associated with higher train speeds, the Federal Government should institute into legislation a 25 miles per hour speed limit for all trains carrying dangerous goods or commodities within Metropolitan Toronto.

(5) Risk versus Cost:

Exhibit 10 is a useful piece of information developed by the consultants because it provides a plot of the risks of the alternatives versus the costs of the alternatives. From this, it would appear that:

- (i) the alternatives are grouped into three bands. The highest average risk is associated with options within Corridor A while, not surprisingly, the lowest average risk is achieved with Corridor C options (a 50 to 75 per cent. reduction from Corridor A option alternatives);



- (ii) providing technological improvements to the existing system (which includes the CP North Toronto and CN Halton/York rail lines) provides only a marginal reduction in risk (10 per cent.) for a rather substantial expenditure of \$577 million. Of this cost, \$300 Million is targetted for grade separations on new rail links and the remainder for track and signal improvements. Presumably, this same relationship is comparable with the other two corridor alternatives;
- (iii) what is not highlighted in the consultants' report is the significant reduction in societal risk on specific segments of certain corridors. For example, relocating dangerous goods rail traffic from the CP North Toronto line within the central area of Toronto to a new rail corridor outside of Metropolitan Toronto reduces the risk on that rail segment by 97 per cent. A similar reduction results from relocating dangerous goods traffic from the CN Halton/York corridor, and
- (iv) options A1, B1A, and C3 are the lowest cost options for Corridors A, B and C. However, option A1 is the "do nothing" alternative. Option B1A makes use of the existing CN Halton/York line with some modification for new connections around populated areas. Overall, this option does little in the way of alleviating the concerns of the City of North York and nearby municipalities in the Region of York.

From a technical standpoint, the C3 option appears to provide the most desirable benefits (better risk and socio-environment impact relationship) for the cost and appears to be the preferred option based on Metropolitan Council's previous position.

#### (6) Emergency Response:

The conclusions that can be drawn from the consultants' findings on this topic are that municipalities are not prepared and should exercise greater response for emergency planning and preparedness. Considering that rail transportation comes under federal jurisdiction, and since the type of cargo being transported is unknown to municipalities until perhaps an incident occurs, it would be desirable from all standpoints if the Federal Government were to:

- (i) undertake a leadership role in the preparation aspects for a dangerous goods rail emergency;
- (ii) undertake responsibility to fund municipal emergency response programs, particularly in Metropolitan Toronto's case where 80 per cent. of all dangerous goods transported by rail are through shipments to locations elsewhere in the country;
- (iii) co-ordinate the development of appropriate policies and procedures so that municipalities will have the:
  - resources (personnel and equipment),
  - experience (knowledge of hazards, emergency response, etc.), and
  - ability
 to deal effectively with any dangerous goods emergency involving railways; and
- (iv) assist, along with the railways, producers, and users of dangerous goods, in providing information for the public and municipalities.

For municipal response agencies, this would assist in evaluating how to deal with the problem as well as assess the extent of a rail disaster impact.

(7) Other:

The previous joint submission made by the Councils of Metropolitan Toronto and the six Area Municipalities reiterated the concern with cabooseless trains. The recent decision pertaining to "cabooseless train operations on CN and CP trackage", submitted to the Railway Transport Committee by Commissioner F. J. Walter, recommends that cabooses can be omitted from trains provided certain operational and safety improvements are implemented.

An interesting decision in this document recommends that "where any component or function of an end-of-train-information-system fails en route, the cabooseless train shall proceed to the next crew change point at a speed not exceeding 25 miles per hour" It can only be presumed from this that the F. J. Walter Commission felt that the use of modern technology is not flawless and cannot adequately replace the human sensory capabilities of a crew member at the end of a freight train. In this regard, the 25 miles per hour maximum speed limit was considered a safeguard towards minimizing risk to train crews and the public.

In view of this and the fact that there exists a significant higher risk on the CP North Toronto and CN Halton/York rail lines, it would seem prudent to reduce all unnecessary risks for trains transporting dangerous goods or commodities. Towards this effort, cabooses should be retained on trains within Metropolitan Toronto until dangerous goods rail traffic is relocated to a new rail corridor.

Rationale for Conclusions:

Having reviewed the Federal Task Force consultants' findings, there appear to be considerable benefits in relocating dangerous goods rail traffic from the CP North Toronto line to a new rail corridor (specifically the C3 option of the Northern Line alternative) outside of Metropolitan Toronto. Consider that:

- (1) 80 per cent. of all dangerous commodities rail traffic transported into Metropolitan Toronto is destined to other locations in the country.
- (2) Societal risk on specific segments of rail corridors within the greater Metropolitan Toronto area, such as the CP North Toronto line through the central area of Toronto, is considerably higher than other sections of the system.
- (3) The shift of risk with relocating traffic to a new Corridor C option is significant:
  - a 97 per cent. risk reduction on the central segment of the CP North Toronto line; and
  - a 95 per cent. risk reduction on the central segment of the CN Halton/York line.
- (4) The features of the CP North Toronto line through the central area of Toronto are such that the cost of a Mississauga-type accident might be in the order of \$690 Million (five times that of Mississauga, estimated at \$138 Million). Accessibility to this corridor is of considerable concern and there would be great difficulty in responding to a Mississauga-type incident. The proposed new rail corridor could be developed and protected so that restrictions of this type would not exist.

- (5) Relocation of dangerous goods traffic (or all main-line train traffic, as the case may be) releases capacity for possible commuter rail use and this would provide substantial benefits in the long term for the Lakeshore GO line and other rail lines. There is a limit to operational improvements that can be implemented on the Lakeshore GO line.
- (6) A new rail corridor would not only reduce overall societal risks, but would also accommodate future rail capacity needs as well as provide more efficient rail operations (particularly where rail operating speeds are concerned). The cost of retrofitting an existing rail corridor to obtain additional rail capacity would be proportionately greater than providing the same capacity in a new location.
- (7) While the C3 option of the new Northern Line alternative costs \$725 million, somewhat more than providing technological improvements to the current system at a cost of \$577 million, the added benefits of a new, non-restricted corridor against the constraints that exist on the CP North Toronto line are or should be obvious.

As a result, the only reasonable conclusions that can be drawn are:

- (1) Construct a new rail corridor outside of Metropolitan Toronto and relocate to it dangerous goods and other non-Metropolitan Toronto oriented rail traffic presently using the CP North Toronto line. The C3 Northern Line alternative is the preferred new route.
- (2) If it is not feasible to proceed with such a project at the present time, for whatever reason, then steps should be taken to ensure that the Federal Government protects the option for a new rail corridor (C3 Northern Line option) for future use.
- (3) Whether a decision is made to implement a new rail line in the immediate future or in the long term, a substantial period of time will be required before implementation is completed. In the interim, the Federal Government should make a firm decision to:
  - (a) further examine and implement operational and safety improvements which do not require extensive capital funding on existing rail corridors within Metropolitan Toronto;
  - (b) advise municipalities what actions will be undertaken and how these actions are intended to reduce risks;
  - (c) effectively monitor rail safety and operational improvements, as well as any new rail regulations to be implemented to determine whether they will be beneficial;
  - (d) co-ordinate the development of policies and procedures for emergency preparedness so that municipalities have the resources, experience and ability to deal with dangerous goods rail disasters;
  - (e) assume the responsibility for funding municipal emergency response programs, particularly towards offsetting resource costs (personnel, equipment, etc.);
  - (f) provide more information to the public pertaining to the risk of dangerous goods shipments by rail and steps that are being taken to minimize this risk;
  - (g) institute into federal legislation a 40 kilometres per hour (25 miles per hour) maximum speed limit for trains carrying dangerous goods or commodities within Metropolitan Toronto, until further analysis is undertaken which disproves the consequences of the risks associated with higher train speeds; and

- (h) retain cabooses on trains transporting dangerous goods or commodities through the Metropolitan Toronto area.

**The Transportation Committee reports having received the following communication (January 12, 1988) from the City Clerk of Toronto:**

At its meeting held on January 11, 1988, City Council adopted the following motion of Alderman Walker:

"Whereas the City of Toronto wishes to eliminate the high level of population exposure to the rail transportation of dangerous commodities, which is creating an increasing threat of a disastrous accident threatening the lives of our citizens;

Whereas the Government of Canada has established a Task Force to study the feasibility of relocating the C.P. North Toronto Subdivision to a protected corridor outside of Metropolitan Toronto and has called upon the City of Toronto to voice their opinion on this matter;

Whereas the City of Toronto is formally making its submission to the Dangerous Goods Task Force tomorrow, January 12, 1988;

Therefore be it resolved that City Council endorse the following resolution

- (a) that all through-rail traffic be removed from passing through the City of Toronto to a protected by-pass corridor as a long term permanent solution,
- (b) that the Federal Task Force recommend such solution and as an immediate first step designate the appropriate corridor and assemble the land required for this route;
- (c) that the Government of Canada ensure maximum operating safety along the railway lines in the City of Toronto and take the necessary steps to this end, including the permanent installation of a 25 miles per hour speed limit on dangerous commodity shipments on the North Toronto subdivision;
- (d) that the Task Force select the C3 protected corridor alternative as the network solution; and
- (e) that the City of Toronto provide all relevant co-operation to the Government of Canada in implementing the C3 option."

**The Transportation Committee further reports having also received the following communication (January 18, 1988) from the City Clerk of Toronto:**

City Council, at its meeting held on January 11 and 15, 1988, adopted the following resolution:

"Whereas over the last several years the City of Toronto has formally requested a permanent reduction in the speed of trains carrying dangerous goods to 25 miles per hour;

Whereas the City of Toronto has formally over the last several years declared its desire for through-rail traffic to be relocated into a protected corridor north of Metropolitan Toronto;



Whereas Mayor Arthur Eggleton submitted the City of Toronto's formal position to the Toronto Area Rail Transportation by Dangerous Goods Task Force on January 12, 1988, confirming the above, and that the protected corridor be the C3 option of the Northern Line Alternate;

Whereas the Cities of Scarborough, Etobicoke and York have also endorsed the C3 option of the Northern Line Alternate;

Whereas the Metropolitan Commissioner of Roads and Traffic, Mr. Sam Cass, has by a report dated December 21, 1987, to the Metropolitan Transportation Committee recommended the C3 option of the Northern Line Alternate and the establishment of a legislated speed limit of 25 miles per hour for trains carrying dangerous goods or commodities within Metropolitan Toronto;

Therefore be it resolved:

- (1) that the City of Toronto endorse the recommendations outlined in the Commissioner of Roads and Traffic's report dated December 21, 1987, to be considered by the Metropolitan Transportation Committee on Monday, January 18, 1988;
- (2) that the City Clerk forward the City's endorsement to the Metropolitan Toronto Clerk for consideration by the Metropolitan Transportation Committee on Monday, January 18, 1988; and
- (3) that Rule 36 be suspended with insofar as it relates to this matter."

**The Transportation Committee further reports having also received the following communication (January 18, 1988) from the City Clerk of Toronto:**

The City Council, at its meeting held on January 11 and 15, 1988, adopted the following resolution:

"Whereas the 1983 Railway Transport Committee Burton Post Report identified that the potential for a catastrophe exists in the City of Toronto concerning the transportation of dangerous goods by rail;

Whereas the November, 1986, City of Toronto study, known as the Wade Report, places the C.P. North Toronto Subdivision into the special hazard zone;

Whereas the Federal Task Force dealing with rail relocation and rerouting in the Greater Metropolitan Toronto Area heard representation by Mayor Arthur Eggleton on January 12, 1988, concerning this most serious issue;

Whereas the Planning and Development Department is currently developing environmental policies for inclusion in the City's Official Plan;

Whereas the question of land use compatibility specifically regarding safety, noise and vibrations with respect to rail operations needs to be addressed;

Therefore be it resolved:

- (1) that the Planning and Development Department of the City of Toronto prepare a status report on environmental policy specifically dealing with railway impacts, particular attention to be paid to safety, noise and vibration impacts; and
- (2) that Rule 36 be suspended with insofar as it relates to this matter."

**The Transportation Committee further reports having also received the following communication (January 14, 1988) from the City Clerk of Scarborough:**

Enclosed for your information is a copy of Clause No. 4 of Report No. 2 of the Works and Transportation Committee adopted by the City of Scarborough Council on January 11, 1988.

(Clause No. 4 of Report No. 2 of the Works and Transportation Committee, City of Scarborough, adopted by Scarborough Council on January 11, 1988.)

4.

**The Toronto Area Rail Transportation of Dangerous Goods Task Force.**

Committee received report of the Executive Director Engineering Planning dated January 4, 1988, reviewing the nine summary reports regarding various aspects of the movement of dangerous goods by rail, issued by the Toronto Area Rail Transportation of Dangerous Goods Task Force. The Executive Director recommends as follows:

**Recommendations:**

It is recommended that the Council of the City of Scarborough forward this report to the Federal Task Force concerning the transportation of dangerous goods within the City of Toronto area.

The following specific recommendations represent the City of Scarborough position:

1. That the Federal Government make an immediate decision to relocate dangerous goods rail traffic presently using the CP North Toronto/CP Belleville rail corridor to a new rail corridor outside of Metropolitan Toronto. In this regard the "rationalization of the rail lines" proposal outlined in this report should be considered for implementation.
2. In the event that the Federal Government decides that it cannot accept the "rationalization" concept, then, a commitment should be made to protect a future new rail corridor outside of Metropolitan Toronto. In this regard, the preferred new route should be in the north corridor alternative (Corridor C).
3. That the voluntary 25 miles per hour maximum speed limit be maintained for trains carrying dangerous goods, special dangerous goods and residue cars, until further analysis is undertaken with respect to the specific conditions related to the CP line through Metropolitan Toronto.
4. That whether or not an immediate decision is made regarding the construction of a new rail corridor, substantial efforts should be made by the Federal Government to:
  - (a) further examine and implement operational and safety improvements which do not require extensive capital funding on existing rail corridors within the Greater Metropolitan Toronto Area;
  - (b) advise municipalities what actions will be undertaken and how these actions are intended to reduce risks;



- (c) effectively monitor rail safety and operational improvements, as well as any new rail regulations to be implemented to determine whether they will be beneficial;
  - (d) co-ordinate the development of policies and procedures for emergency preparedness so that municipalities have the resources, experience and ability to deal with dangerous goods rail disasters;
  - (e) assume the responsibility for funding municipal emergency response programs, particularly towards offsetting resource costs (personnel, equipment, etc.); and
  - (f) provide more information to the public pertaining to the risk of dangerous goods shipments by rail.
5. That the Federal Government give serious consideration for the provision of increased commuter rail traffic on both CN and CP rail lines when reviewing the alternatives for relocating freight traffic.
  6. That whether or not a decision is made regarding the construction of a new rail corridor or "rationalization" of the rail lines, the Federal Government should consider the relocation of the CPR Agincourt Yard to a location where such an operation will have no adverse impact on any population centres and which will facilitate the interchange of traffic between the CP and CN lines.

Further it is recommended that this report be forwarded to the following for their appropriate action:

- (a) the Ontario Minister of Transportation, The Honourable Ed Fulton; and
- (b) The Municipality of Metropolitan Toronto Council.

Controller J. Trimmer, Alderman M. Mushinski, Alderman B. Sanders and Mr. H. Behrend, M-TRAC, addressed Committee.

Committee recommends:

- (a) Adoption of the foregoing report of the Executive Director Engineering Planning, subject to amending Recommendation 3 to read "that a 25 miles per hour maximum speed limit be made mandatory and be maintained for trains carrying dangerous goods...."
- (b) That a copy of the report of the Executive Director Engineering Planning be forwarded to all City of Scarborough Members of the House of Commons and Members of the Ontario Legislature.
- (c) That the Executive Director Engineering Planning present the City of Scarborough Council's Response to The Toronto Area Rail Transportation of Dangerous Goods Task Force. (See Schedule "A" attached to this Report for complete report of the Executive Director Engineering Planning.)

**The Transportation Committee further reports having also received the following communication (January 11, 1988) from the Deputy Chairman, Metro Toronto Residents' Action Committee (M-TRAC), addressed to the Toronto Area Rail Transportation of Dangerous Goods Task Force:**

We are pleased to enclose our comments on the consultants' reports and would urge once again that recommendations flowing from the Task Force centre on the need for a lasting solution to the long-festering dangerous-goods rail problem in the Metropolitan Toronto area.

Train accidents may be viewed as unpredictable. While we are cognizant of the fact that total train accidents in Canada have declined in recent years, serious train accidents, as defined by the Canadian Transport Commission, have increased.

It may not be the one car that derails at low speed that is a problem but rather the derailment of a whole group of cars, such as at Don Mills last July, and especially if such trains carry dangerous chemicals at high speed through the narrow high-density Metropolitan Toronto Corridor.

We believe the Risk Management Report by Concord Scientific and the IBI Group has crystallized the risks involved if nothing is done. Public concern is high and the cry for relief is real. Thousands of people are waiting for action from this Task Force. We urge you to listen to their plea.

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The Transportation Committee further reports that the following persons appeared before the Transportation Committee in connection with the foregoing matter:

- Alderman Michael Walker, City of Toronto;
- Councillor June Rowlands, City of Toronto, and a Member of the Community Services and Housing Committee, the Metropolitan Executive Committee and the Metropolitan Council;
- Mr. Harry Behrend, Deputy Chairman, Metro Toronto Residents' Action Committee (M-TRAC); and
- Ms. Gail Pratley, Iroquois Community Association, Planning and Community Development, Agincourt, and submitted a communication (January 11, 1988) from Mr. R. Moeser, Chairman, The Coalition of Scarborough Community Associations addressed to the Executive Director, Toronto Area Rail Transportation of Dangerous Goods Task Force, outlining the Association's views on the transportation of dangerous goods in Metropolitan Toronto.

(A copy of each of a List of Exhibits and Exhibits 1 to 10 referred to in the foregoing report of the Commissioner of Roads and Traffic, of Schedule "A" referred to in the foregoing communication from the City Clerk of Scarborough, and of the Metro Toronto Residents' Action Committee (M-TRAC) comments (January, 1988) to the Toronto Area Rail Transportation of Dangerous Goods Task Force entitled, "Guarding Their Lives," referred to in the foregoing communication from the Deputy Chairman, M-TRAC, has been forwarded to each Member of Council, and a copy of each is on file in the office of the Metropolitan Toronto Clerk.)

*(The Metropolitan Executive Committee reports, for the information of Council, that Mr. H. Behrend, Deputy Chairman, Metro Toronto Residents' Action Committee (M-TRAC), appeared before the Metropolitan Executive Committee in support of the foregoing recommendations of the Transportation Committee.)*

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*(The Metropolitan Council on February 2 and 3, 1988, had before it during consideration of the foregoing Clause communications from the following:*

*(January 15, 1988) from the Deputy City Clerk, City of Etobicoke, advising that the Council for the City of Etobicoke on January 11, 1988, adopted Clause No. 24 of the Second Report of the Works Committee, 1988, which recommended that the City concur in the contents and recommendations of the proposed joint submission by Metropolitan Toronto and the Area Municipalities to the Toronto Area Rail Transportation of Dangerous Goods Task Force, dated December 21, 1987;*

*(January 19, 1988) from the Borough Clerk, Borough of East York, advising that the Council of the Borough of East York on January 18, 1988, adopted Item No. 9 of Report No. 2 of the Legislation, Building & By-law Enforcement Committee regarding routing controls for the transportation of hazardous material, wherein it recommended that Council concur with the recommendations contained within the December 21, 1987, report to the Metropolitan Transportation Committee;*

*(January 25, 1988) from the City Clerk, City of North York, forwarding an extract from the Minutes of the meeting of North York Council held on January 25, 1988, headed "Transportation of Dangerous Goods By Rail Within Metropolitan Toronto", and advising that Council adopted the report of its Commissioner of Traffic recommending that the City of North York endorse the recommendations and conclusions of the Report from the Commissioner of Roads and Traffic, Metropolitan Toronto, dated December 21, 1987; and*

*(January 28, 1988) from the Deputy City Clerk, City of York, forwarding a copy of Resolution No. 148-88, passed by the Council of the City of York on January 25, 1988, wherein it recommends that the City of York Council endorses the position taken by the Metropolitan Toronto Transportation Committee which urges the Federal Task Force to heed Metro's request for a 25 m.p.h. speed limit on all dangerous goods trains, including residue cars, in the Metro area; and further calls upon the Federal Minister of Transport to facilitate those means necessary for the relocation of the C.P. Line to a protected corridor.)*

*(A copy of each of the communications referred to above is on file in the office of the Metropolitan Toronto Clerk.)*

**Toronto, Ontario.  
February 11, 1988.**



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**Deputy Metropolitan Clerk.**









NOTES FOR REMARKS

BY

HON. MICHAEL WILSON, P.C., M.P.

ETOBICOKE CENTRE

TO

THE INSTITUTE OF RISK RESEARCH

UNIVERSITY OF WATERLOO

WATERLOO, ONTARIO

THE TRANSPORTATION OF DANGEROUS GOODS:

LET'S GET CANADA MOVING AGAIN

APRIL 30, 1984

CHECK AGAINST DELIVERY

I AM PLEASED TO BE SPEAKING TODAY AT THE UNIVERSITY OF WATERLOO ON BEHALF OF THE PROGRESSIVE CONSERVATIVE PARTY. DON MAZANKOWSKI, OUR TRANSPORT CRITIC, WAS TO HAVE BEEN YOUR SPEAKER, BUT HE UNFORTUNATELY HAD TO CANCEL DUE TO A CONFLICT IN HIS SCHEDULE.

HE AND I HAVE DISCUSSED AT LENGTH THE PROBLEMS INVOLVED IN THE TRANSPORTATION OF HAZARDOUS GOODS. WHAT YOU WILL HEAR TODAY REFLECTS THESE DISCUSSIONS AND THE POSITION OF OUR PARTY.

I AM ALSO PLEASED TO HAVE THIS OPPORTUNITY BECAUSE OF MY PERSONAL INTEREST IN AND CONTACT WITH THE ISSUE. IN NOVEMBER 1979, IN THE WEST END OF TORONTO WHERE I LIVE, THERE WAS SUDDENLY A BRIGHT LIGHT IN THE SKY. THE WINDOWS RATTLED, AND THE CHINA SHOOK ON THE SHELVES. THIS WAS OF COURSE THE MISSISSAUGA TRAIN DERAILMENT, THE INCIDENT THAT BROUGHT THE ISSUE OF THE TRANSPORTATION OF HAZARDOUS GOODS INTO THE PUBLIC EYE IN A RATHER BIG WAY.

MY TORONTO HOME AND MY RIDING OF ETOBICOKE CENTRE ARE LESS THAN 10 MINUTES AWAY FROM THE LOCATION OF THE MISSISSAUGA

DERAILMENT. I AM SURE YOU CAN APPRECIATE THE INTENSITY OF LOCAL INTEREST AND CONCERN; SOME HOUSES ARE SEVENTY FEET AWAY FROM THE TRACK. THERE IS A HEAVY POPULATION CONCENTRATION NEAR THE RAIL CORRIDOR - INCLUDING THE RIDING'S LARGEST CONCENTRATION OF APARTMENT BUILDINGS, FIVE SCHOOLS, AND DOZENS OF SINGLE FAMILY DWELLINGS.

HOWEVER, IN MY POSITION AS THE PROGRESSIVE CONSERVATIVE INDUSTRY CRITIC, I AM ALSO SENSITIVE TO THE COST ASPECTS OF REGULATING THE TRANSPORT OF DANGEROUS GOODS. THERE IS A CRUCIAL NEED TO IMPROVE CANADA'S INTERNATIONAL COMPETITIVE POSITION, AND TRANSPORT COSTS REPRESENT AN IMPORTANT PART OF THE OVERALL COST STRUCTURE. WE MUST ALSO CONSIDER THE POSITION OF SURFACE TRANSPORTATION AS THE MAIN PROVIDER OF TRANSPORT IN CANADA.

THEREFORE, IT IS IMPORTANT FOR ME AS BOTH A REPRESENTATIVE OF MY CONSTITUENTS AND A SPOKESMAN FOR THE INTERESTS OF INDUSTRY, TRADE AND COMMERCE TO HAVE A BALANCED PERSPECTIVE OF THE SAFETY ISSUE.

I WOULD LIKE TO SET MY REMARKS CONCERNING THE MOVEMENT OF DANGEROUS GOODS, OR HAZARDOUS MATERIALS, WHICHEVER YOU PREFER, IN THE LARGER CONTEXT OF OVERALL TRANSPORTATION SAFETY.

PROMOTING THE SAFE MOVEMENT OF DANGEROUS GOODS SHOULD BE PART OF A BROAD PROGRAM TO IMPROVE THE SAFETY AND SECURITY OF OUR NATIONAL TRANSPORTATION SYSTEM.

SAFETY HAS BEEN, AND WILL ALWAYS BE, IN THE FOREFRONT OF OUR PARTY'S TRANSPORTATION POLICY.

SHORTLY AFTER COMING INTO OFFICE IN 1979, WE ACTED SWIFTLY IN DEALING WITH THE ISSUE OF AVIATION SAFETY WHICH WAS UNDERMINING PUBLIC CONFIDENCE IN THE AIR SYSTEM BY APPOINTING THE DUBIN INQUIRY.

WE ALSO ACTED SWIFTLY IN ESTABLISHING A FULL ENQUIRY INTO THE MISSISSAUGA RAIL DISASTER WHEN IT BECAME OBVIOUS THAT THE NORMAL CTC PROCESS WOULD NOT SATISFY THE NEED FOR AN OBJECTIVE AND THOROUGH INVESTIGATION.

BOTH OF THESE COMMISSIONS WERE SIGNIFICANT IN THAT THEY POINT OUT A BASIC WEAKNESS IN OUR SYSTEM OF INVESTIGATING TRANSPORTATION ACCIDENTS, MONITORING SAFETY AND PRODUCING RECOMMENDATIONS FOR IMPROVEMENT.

IN OUR VIEW, ONE OF THE FIRST INITIATIVES THAT SHOULD BE TAKEN IN THE INTEREST OF DEVELOPING A LONG-TERM IMPROVEMENT IN TRANSPORTATION SAFETY IS THE ESTABLISHMENT IN CANADA OF AN EQUIVALENT TO THE AMERICAN NATIONAL TRANSPORTATION SAFETY BOARD.

THIS WOULD BE AN INDEPENDENT BODY WITH THE RESPONSIBILITY OF OVERSEEING SAFETY IN ALL MODES, GOVERNING THE ENFORCEMENT OF STANDARDS, ACCIDENT INVESTIGATION AND THE DEVELOPMENT OF IMPROVED SAFETY PRACTICES. THIS MUST ALSO ADDRESS THE TRICKY PHENOMENON OF ESTABLISHING THE RESPONSIBILITY OF INTER-MODAL TRANSPORTATION SUCH AS CONTAINER AND PIGGY-BACK TANSPORT.

MY COLLEAGUE, MIKE FORRESTALL, M.P. FROM NOVA SCOTIA, HAS DURING 10 PREVIOUS PARLIAMENTARY SESSIONS INTRODUCED A PRIVATE MEMBERS BILL ADVOCATING SUCH A BOARD. HIS EXPERIENCE, PARTICULARLY REGARDING MARINE SAFETY, LED HIM TO CONCLUDE THAT SUCH A BODY WOULD BE IN THE BEST INTEREST OF THE TRANSPORTATION INDUSTRY IN THIS COUNTRY.

ONE OF THE KEY RECOMMENDATIONS OF THE DUBIN INQUIRY WAS THE ESTABLISHMENT OF AN INDEPENDENT AVIATION SAFETY BOARD, A PROPOSAL WHICH WAS ENDORSED BY ALL CONCERNED. THE NEW CANADIAN AVIATION SAFETY BOARD IS SUPPOSED TO BEGIN OPERATION LATER THIS YEAR. WE BELIEVE THIS CONCEPT SHOULD BE EXPANDED TO COVER THE ENTIRE TRANSPORTATION NETWORK.

TO STRENGTHEN THE EFFECTIVENESS OF SUCH BOARDS IN GENERATING IMPROVEMENTS TO THE SYSTEM, IMPLEMENTATION OF THEIR SPECIFIC RECOMMENDATIONS SHOULD BE ADDRESSED WITHIN A FORMAL MECHANISM.

THIS WOULD MEAN THAT THE MINISTER AND THE SPECIFIC TRANSPORTATION COMPANY OR AGENCY CONCERNED WOULD BE HELD ACCOUNTABLE AT ESTABLISHED TIME INTERVALS FOR THEIR ACTIONS IN FULFILLING THE APPLICABLE RECOMMENDATIONS. SUCH BASIC STRUCTURAL REFORMS WOULD PROVIDE THE FRAMEWORK TOWARD A LONG-TERM IMPROVEMENT IN THE TRANSPORTATION SYSTEM.

WITHIN THIS CONTEXT, THERE WILL REMAIN A NEED FOR FURTHER ACTION TO ADDRESS SPECIFIC AREAS SUCH AS DANGEROUS GOODS MOVEMENT AND TO RESPOND TO SHORT AND MEDIUM-TERM ISSUES.

EVERY YEAR OVER 700 BILLION TON-MILES OF HAZARDOUS MATERIALS ARE SHIPPED ACROSS NORTH AMERICA. ESTIMATES ARE THAT ONE



TRUCK IN TEN AND ONE OUT OF EVERY 23 RAILCARS CARRIES HAZARDOUS MATERIALS.

IN CANADA, CN ESTIMATES THAT IT TRANSPORTS OVER 105,000 CARLOADS OF DANGEROUS GOODS ANNUALLY AND THAT THEY ARE SHIPPED ON ROUGHLY 35% OF CN'S TRAINS.

CLEARLY, HAZARDOUS OR DANGEROUS GOODS ARE WITH US IN LARGE QUANTITIES AND, AS OUR INDUSTRIES AND OUR TECHNOLOGICAL DEVELOPMENT BECOME INCREASINGLY COMPLEX, I BELIEVE WE WILL BE CONFRONTED WITH MORE AND MORE OF THESE COMMODITIES.

AS CONSUMERS, WE MUST BEAR IN MIND THAT MANY OF OUR EVERYDAY PRODUCTS, ITEMS THAT WE CONSIDER SAFE OR HARMLESS, BEGIN AS DANGEROUS COMMODITIES: MANY HOUSEHOLD CLEANERS, PAPER PRODUCTS AND PLASTICS ARE MADE WITH HAZARDOUS SUBSTANCES.

DANGEROUS GOODS ARE GOING TO BE SHIPPED. THAT IS A FACT OF LIFE IN OUR SOCIETY. AND THEY ARE GOING TO BE SHIPPED INTO AND OUT OF DENSELY POPULATED URBAN AREAS. UNDER SUCH CONDITIONS, SAFETY MUST BECOME THE NUMBER ONE PRIORITY.

WHILE GIVING SAFETY THIS PRIORITY, ECONOMIC REALITY DICTATES THE NEED TO STRIKE A BALANCE BETWEEN THE ENORMOUS EFFECTS OF ANY SAFETY INITIATIVE AND THE NEED TO FACILITATE A SAFE ENVIRONMENT OR TO CORRECT A SPECIFIC DEFICIENCY.

JUDGING THAT BALANCE, AND ASSESSING THE RISKS AND TRADE-OFFS INVOLVED, IS REALLY WHAT THE INSTITUTE FOR RISK RESEARCH IS ALL ABOUT.

WE LIVE IN A WORLD FULL OF RISKS; EACH WITH ITS COSTS AND BENEFITS WHICH NEED TO BE EVALUATED.

IN ALL TOO MANY INSTANCES WE ARE ONLY NOW BEGINNING TO GAIN A TRUE APPRECIATION OF THE RISKS INVOLVED IN OUR MODERN SOCIETY.

THE DECISIONS ON WHERE TO DRAW THE LINE, WHERE THE TRADE-OFFS SHOULD EXIST, ARE ULTIMATELY, IN OUR SOCIETY, POLITICAL ONES.

WHILE POLITICANS WANT AND NEED THE INPUT OF EXPERTS IN THE FIELD SUCH AS YOURSELVES, IT IS THEY WHO MUST PASS THE LAWS, ADOPT THE REGULATIONS AND ESTABLISH AN ENVIRONMENT IN WHICH THE RISKS ARE DEEMED TOLERABLE.

IN ASSESSING THE RISKS INVOLVED IN THE TRANSPORTATION INDUSTRY TODAY, I BELIEVE THREE KEY PRINCIPLES MUST BE KEPT IN MIND:

- 1) THE MOVEMENT TOWARDS DEREGULATION CANNOT TRANSGRESS THE CODE NECESSARY TO ACHIEVE A SAFE OPERATING ENVIRONMENT;
- 2) TECHNOLOGICAL CHANGE SHOULD BE HARNESSSED TO ENHANCE SAFETY, NOT DIMINISH IT;
- 3) REDRESS OF LONG ESTABLISHED DEFICIENCIES SHOULD BE CARRIED OUT IN AN ORDERLY AND PRACTICAL MANNER EMPLOYING COMMON SENSE RATHER THAN HYSTERIA.

THE BOTTOM LINE MUST BE TO ENSURE THAT SAFETY IS IMPROVED IN EVERY WAY POSSIBLE.

THE MISSISSAUGA RAIL DISASTER IN NOVEMBER 1979, WHICH CAUSED THE EVACUATION OF OVER 200,000 PEOPLE AND MADE HEADLINES AROUND THE WORLD, SERVED IN MANY WAYS AS A CATALYST FOR IMPROVING THE MOVEMENT OF HAZARDOUS MATERIALS.

THIS PROCESS WAS BEGUN BY THE PROGRESSIVE CONSERVATIVE GOVERNMENT WITH THE APPOINTMENT OF THE GRANGE INQUIRY.

UNFORTUNATELY, AS JUSTICE GRANGE HAS OBSERVED, "THE LONGER WE GO FROM MISSISSAUGA, THE LESS URGENT IT WILL BE TO PEOPLE."

I THINK TO SOME EXTENT, THIS HAS OCCURRED.

IN 1980, FOR EXAMPLE, PARLIAMENT EXPEDITIOUSLY PASSED BILL C-18 DEALING WITH THE TRANSPORTATION OF DANGEROUS GOODS.

NOW, FOUR YEARS LATER, MANY OF THE REGULATIONS REQUIRED TO IMPLEMENT THAT ACT ARE STILL NOT FULLY IN PLACE.

WHILE I RECOGNIZE THE COMPLEXITY OF THE REGULATIONS, AND THE VALUABLE PROCESS OF PUBLIC COMMENT THAT HAS TAKEN PLACE, I THINK WE SHOULD RECOGNIZE THAT THERE HAS BEEN TOO MUCH FOOT-DRAGGING.

WHILE THE REGULATIONS HAVE REMAINED IN LIMBO, ACCIDENTS KEEP HAPPENING.

FORTUNATELY, INCIDENTS SUCH AS MISSISSAUGA ARE EXTREMELY RARE BUT, NEVERTHELESS, IN 1982 THERE WERE 170 MAJOR RAIL ACCIDENTS INVOLVING HAZARDOUS MATERIALS AND 159 IN 1983. A FURTHER 414 MINOR INCIDENTS TOOK PLACE OVER THOSE TWO YEARS.

WHILE DETAILED STATISTICS ON HIGHWAY ACCIDENTS INVOLVING DANGEROUS GOODS ARE NOT AVAILABLE, USING THE ONE IN TEN FIGURE NOTED EARLIER WOULD SUGGEST 500-600 HIGHWAY ACCIDENTS INVOLVING DANGEROUS GOODS PER YEAR IN ONTARIO ALONE.

I THINK, FRANKLY, THE POLITICAL MOMENTUM FOR ACTION HAS DROPPED AND THAT WE NEED TO REKINDLE THAT DESIRE AND FINISH PUTTING IN PLACE AN OPERABLE SYSTEM THAT WILL ENHANCE TRANSPORTATION SAFETY.

I SAY THIS RECOGNIZING THAT THE STUMBLING BLOCKS THAT DELAY ACTION ARE CONSIDERABLE.

IN OUR OWN UNIQUE MANNER, THIS IS A MATTER OF JOINT FEDERAL-PROVINCIAL JURISDICTION. WHILE THE ORIGINAL COMMITMENT WAS TO A UNIVERSIAL PROGRAM IDENTICAL IN ALL REGIONS, NOW THAT WE HAVE REACHED THE NITTY-GRITTY, THAT COMMITMENT IS BEGINNING TO UNRAVEL.

I THINK IT IS ESSENTIAL THAT IT BE MAINTAINED.

CLEARLY, THE FEDERAL GOVERNMENT MUST PROVIDE THE LEADERSHIP TO SECURE THAT AGREEMENT. THE NEED FOR FULL CO-OPERATION WITH THE PROVINCES IS ESSENTIAL ESPECIALLY IN THE SPHERE OF TRUCKING, INTER-MODAL AND INTERNATIONAL TRANSPORTATION.

SECONDLY, A GREAT AMOUNT OF OUR TRAFFIC FLOWS ACROSS THE UNITED STATES BORDER.

OVER THE YEARS RECIPROCITY AGREEMENTS HAVE LET GOODS FLOW BACK AND FORTH WHILE MAINTAINING A MUTUALLY ACCEPTABLE SAFETY STANDARD.

THERE IS GREAT CONCERN THAT OUR NEW SYSTEM MAY LEAD TO THE BREAKDOWN OF THOSE ARRANGEMENTS.

WHILE THIS ALSO APPLIES TO THE RAILWAYS, IT IS OF GREAT CONCERN TO THE TRUCKING INDUSTRY AND IS PART OF THE WIDER ISSUE OF OVERALL DEREGULATION WITHIN THAT SECTOR.

THESE ARE CLEARLY ISSUES THAT REQUIRE POLITICAL WILL AND COMMITMENT TO RESOLVE.

IT IS IN CANADA'S BEST INTERESTS, BOTH FROM AN ECONOMIC AND SAFETY STANDPOINT, TO NEGOTIATE WITH THE AMERICANS TO ENSURE CONTINUED LONG-TERM ACCESS ACROSS THE BORDER.

A THIRD REALITY THAT MUST BE FACED IS THE NEED FOR POLITICANS TO FIRMLY GRASP THE POLICY-MAKING NETTLE. MANY OF THE PROBLEMS THAT HAVE OCCURRED IN THE PAST AROSE BECAUSE OF A POLICY VACUUM.



SUCCESSIVE MINISTERS OF TRANSPORT SIMPLY FAILED TO PROVIDE DIRECTION AND LEADERSHIP.

BY DEFAULT, THE REGULATORY AGENCIES BECAME POLICY-MAKERS, WITH LESS THAN SATISFACTORY RESULTS.

JUSTICE GRANGE CONCLUDED THAT THE CTC HAD BEEN RELUCTANT TO IMPOSE COSTLY SAFETY REQUIREMENTS ON THE RAILWAYS. FIRM FEDERAL LEADERSHIP AND A CLEARLY-STATED POLICY WOULD NOT HAVE GIVEN THE CTC THIS CHOICE TO MAKE.

THE REGULATORY AGENCIES THEMSELVES, I THINK, SHOULD COME UNDER SCRUTINY.

THERE IS A LINE OF REASONING THAT SUGGESTS THAT REGULATORY AGENCIES OVER TIME BECOME CAPTIVE TO THE INDUSTRY THEY ARE SUPPOSED TO REGULATE AND THIS, IN TURN, CAN LEAD TO ISSUES SUCH AS SAFETY BEING GIVEN A LOWER PRIORITY THAN IS WARRANTED IN THE GREATER PUBLIC INTEREST.

THE PRESENT SYSTEM CAN ALSO PRODUCE APPARENT CONFLICTS OF INTEREST IN CASES WHERE THE REGULATORY AGENCY HAS TO EXAMINE ITS OWN RECORD IN MAINTAINING SAFETY STANDARDS.

WHILE I AM HESITANT TO CRITICISE THE CTC, I THINK, UNAVOIDABLY, THERE HAVE BEEN INSTANCES OF THIS NATURE .

IT WAS AS A RESULT OF SUCH CONCERNS THAT THE PRESSURE FOR INDEPENDENT SAFETY BOARDS AROSE AND, IN THE AIR MODE, SUCCEEDED IN PRODUCING ACTION.

HOWEVER, I AM NOT CONVINCED THAT SIMPLY ESTABLISHING NEW BOARDS AND PROMULGATING PAGES AND PAGES OF NEW REGULATIONS WILL SUBSTANTIALLY IMPROVE THE TRANSPORTATION OF DANGEROUS GOODS. I AM CONVINCED THAT WE WILL NOT SUCCEED SIMPLY BY LAYERING A NEW BOARD WITH RESPONSIBILITIES COMPARABLE TO THOSE OF EXISTING BOARDS.

I KNOW THAT MANY IN THE RELATED INDUSTRIES ARE CONCERNED ABOUT THE COMPLEXITY OF THE PROPOSED REGULATIONS AND THE COST OF COMPLIANCE.

REGULATIONS IMPROVE SAFETY ONLY IF THEY ARE FOLLOWED. DEVISING ELABORATE SCHEMES ON PAPER IS FUTILE IF, IN PRACTICE, THEY ARE UNWORKABLE AND ENCOURAGE NON-COMPLIANCE.

SAFETY IS AN OPERATIONAL ISSUE AS MUCH AS ANYTHING ELSE AND I THINK WE NEED TO RE-EXAMINE THE PROPOSED REGULATIONS TO ENSURE THAT THEY CAN, AND WILL, BE FOLLOWED BY THE PEOPLE WHO ACTUALLY HANDLE THE COMMODITIES INVOLVED.

THE NUMBER OF MAJOR ACCIDENTS SINCE MISSISSAUGA AND THE FINDINGS OF THE RESPECTIVE INQUIRIES AND HEARINGS HAVE CLEARLY DEMONSTRATED THE NEED FOR IMPROVED TECHNIQUES IN HANDLING HAZARDOUS MATERIAL.

I THINK THE FEDERAL GOVERNMENT, WHICH HAS THE PRIMARY RESPONSIBILITY FOR THE NATIONAL TRANSPORTATION SYSTEM, SHOULD BE PROVIDING THE LEADERSHIP IN RESEARCH COVERING IMPROVED SHIPPING METHODS.

GREATER IMPETUS SHOULD BE GIVEN TO THE DEVELOPMENT OF NEW CONTAINERS AND RAIL CARS, AND NEW HANDLING PROCEDURES AND SAFETY TECHNIQUES.

AS A TORONTO AREA M.P. WHOSE RIDING CONTAINS SOME OF THE MOST HEAVILY USED TRACKAGE IN CANADA, I BELIEVE THERE IS A NEED TO IMPLEMENT, ON A PRIORITY BASIS, INTERIM SAFETY MEASURES UNTIL OUR NEW SYSTEM IS IN PLACE AND OPERATING.

WE SHOULD ACT NOW TO INCREASE THE SAFETY AND SECURITY OF THOSE RESIDING IN HIGH-DENSITY URBAN AREAS THROUGH WHICH LARGE VOLUMES OF DANGEROUS GOODS TRAVEL.

WITH RESPECT TO METRO, I PROPOSE TWO SUCH MEASURES. THE FIRST WOULD BE A REDUCTION IN THE SPEED LIMIT OF DANGEROUS



GOODS TRAINS TO 25 MPH FROM 35 MPH. SECONDLY, I BELIEVE EMPTY HAZARDOUS TANK CARS SHOULD BE TREATED AS FULL, AT LEAST UNTIL NEW DESIGNS ARE DEVELOPED TO VENTILATE THESE CARS ON A TIMELY BASIS. TO DATE, I HAVE SEEN NO CONVINCING EVIDENCE THAT ARGUES AGAINST THESE STEPS.

FURTHER WORK SHOULD ALSO BE DONE TO STUDY THE EFFECT OF MINIMIZING THE SHIPPING OF DANGEROUS COMMODITIES ON ROUTES WITH LOW POPULATION DENSITIES.

PERHAPS YOUR SYMPOSIUM WILL HAVE THE OPPORTUNITY TO EXAMINE THESE MEASURES. IF SO, I WILL BE DELIGHTED TO RECEIVE AND BENEFIT FROM YOUR DISCUSSIONS.

THE NEWLY CREATED INSPECTOR-GENERAL OF SAFETY WITHIN THE DEPARTMENT OF TRANSPORT HAS RECENTLY EXAMINED THE ISSUE. I AM GENERALLY PLEASED WITH SOME OF THE CONCLUSIONS IN HIS REPORT. HOWEVER, HE CONCLUDED THAT WHILE NO CONCRETE EVIDENCE ARGUED AGAINST THE PROPOSAL TO REDUCE THE SPEED OF TRAINS CARRYING HAZARDOUS GOODS IN HIGH POPULATION DENSITY AREAS, AN INSUFFICIENT AMOUNT OF THE EVIDENCE ARGUED IN FAVOUR OF IT AND HE THEREFORE RECOMMENDED NO ACTION BE TAKEN. IT MIGHT HAVE BEEN MORE APPROPRIATE TO GIVE THIS PROPOSAL THE BENEFIT OF THE DOUBT.

WHILE THERE ARE FINANCIAL COSTS INVOLVED IN THE TWO PROPOSALS, I BELIEVE THE REDUCTION IN THE RISK EXPOSURE OF THE GENERAL PUBLIC WARRANTS THEIR ADOPTION ON AN INTERIM BASIS AT LEAST.

TO MOVE FROM THIS PAROCHIAL VIEW BACK TO THE LARGER CONTEXT, I WOULD LIKE TO CONCLUDE BY REITERATING OUR PARTY'S VIEW THAT IMPROVING SAFETY SHOULD BE A MAJOR ELEMENT OF ALL TRANSPORTATION POLICIES.

A SAFE TRANSPORTATION SYSTEM IS AN EFFICIENT ONE THAT MOVES GOODS AND PEOPLE TO THEIR DESTINATION ON TIME AND WITHOUT INCIDENT. SUCH A NETWORK WILL MAKE A POSITIVE CONTRIBUTION TOWARDS CANADA'S ECONOMIC COMPETITIVENESS AND WILL HELP SPUR NEW GROWTH AND DEVELOPMENT. SAFETY AND EFFICIENCY CAN AND MUST WORK TOGETHER.

TRANSPORTATION IS THE VITAL LINK IN OUR ECONOMY AND OUR GOAL IS TO ENCOURAGE THE CONTINUED DEVELOPMENT OF A PRODUCTIVE, SAFE AND RELIABLE TRANSPORTATION NETWORK.

CANADA HAS THE PEOPLE, THE TECHNOLOGICAL EXPERTISE AND THE RESOURCES TO STAY A STEP AHEAD IN TRANSPORTATION.

WE MUST MAKE THE COMMITMENT TO TURN THOSE STRENGTHS INTO ECONOMIC ADVANTAGES NOW AND IN THE FUTURE.

SIMPLY PUT, OUR GOAL IS TO GET CANADA MOVING AGAIN SAFELY, EFFICIENTLY AND PRODUCTIVELY.

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# WHAT IS THE TORONTO AREA RAIL TRANSPORTATION OF DANGEROUS GOODS TASK FORCE?

This is a task force established by the federal Minister of Transport on March 14, 1986, to examine the flow of dangerous goods moving by rail in the Toronto area. The task force is to report to the Transport Minister John C. Crosbie in March 1988.

## WHY WAS THE

### TASK FORCE APPOINTED?

Safety is the federal government's top priority for the transportation system. The task force was established in response to a concern in the greater Toronto area about the transportation of dangerous goods by rail.

### WHAT IS THE MANDATE OF THE TASK FORCE?

The task force has been asked to study the feasibility of rerouting or relocating rail traffic transporting dangerous goods through the Municipality of Metropolitan Toronto and the Regional Municipalities of Durham, York, Peel and Halton. It will also study any additional requirements to improve safety on the existing, or on any rerouted or relocated rail lines.

The task force mandate does not include the construction of facilities or implementation of operational changes. Any such decisions would be taken only after further consideration of the elements reported on in this study.

### WHAT ARE DANGEROUS GOODS?

The Transportation of Dangerous Goods Act specifies more than 3000 dangerous products grouped into nine categories which require special handling when transported in bulk. Nearly 300 of these are deemed to be especially dangerous.

Many of these products are used by industry in the manufacture of goods to maintain our standard of living and some of the especially dangerous goods are also used in everyday life. Examples include chlorine used to purify drinking water or swimming pools and ammonia used to clean windows.

### WHAT IS REROUTING?

Rerouting means using existing rail lines in other areas where there is less risk to the population.

### WHAT IS RELOCATING?

Relocating involves construction of new track and facilities.

### WHAT ELSE

#### MUST BE CONSIDERED?

The task force will consider the impact of rerouting, relocating and additional safety measures on the residents of the area concerned, the shippers, consumers and other modes of transport such as trucking.

It will also examine the costs of each alternative and will consider who should assume them.

The task force will analyze the effect of any alternative on the efficiency of the railway system and its capacity to provide service to its customers. Through all these avenues, the task force will be seeking ways to reduce risk and improve safety.

The study will also identify legislative or regulatory changes required for the alternatives studied. These could affect railway operations, land use and infrastructure such as track, yards and depots.

## WHO IS ON THE TASK FORCE?

**HAROLD F. GILBERT**, Chairman  
Former Deputy Minister of the Ontario Ministry of Transportation and Communications

**GLENN A. SWANSON**

Canadian Pacific Railway

**J. E. (JED) DREW**

Canadian National Railway

**HAROLD A. MORRISON**

Norco Toronto Residents Action Committee  
representing organized community associations

**ROBERT L. MANSVET**

Pharmac Consultants Ltd.  
representing the public at large

**ANNE L. CLARK**

Esso Petroleum Canada  
representing the public at large

**RICHARD PUCCINI**

Government of Ontario

## HOW WILL THE TASK FORCE PROCEED WITH ITS WORK?

The task force was appointed in March 1986. In May, it reported on an issue selected by the Minister which concerned the reduction in speed of trains carrying dangerous goods on CPR's North Toronto sub-division. The task force recommended that the speed of the trains carrying certain dangerous goods be reduced from 56 kilometres per hour (35 mph) to 40 kilometres per hour (25 mph). CPR offered and voluntarily implemented these changes.

In July 1986, the task force ran an advertisement in local and daily newspapers soliciting

written submissions from interested parties to be received by November 30, 1986. A news media briefing was also held, attended by television, radio and newspaper reporters.

Since its inception, the task force has communicated with one metropolitan, four regional and 30 municipal governments to brief them on progress and to obtain their views.

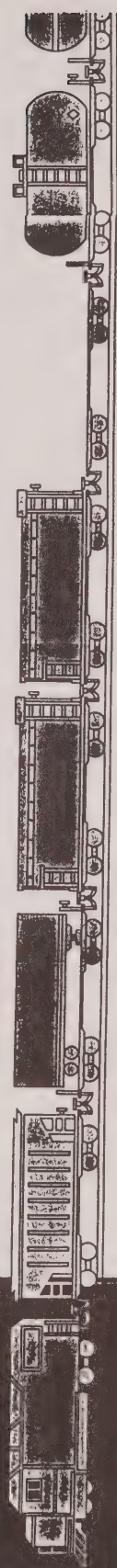
Formal public hearings will be held in July and August 1987. The task force will develop its final report after examining the written submissions and listening to the oral briefings and comments from the public at the public consultation stage. The report will be submitted to the Minister of Transport in March 1988.

## WILL THERE BE PUBLIC CONSULTATION THROUGHOUT THE PROCESS?

Yes. The task force will ensure that interested persons have an opportunity to make their views known both on the issues and on the alternatives which the task force will develop. Public consultation began as soon as the task force was formed by communication with local governments and the news media. Consultation will continue until the task force makes its report to the Minister of Transport.

## WHO CAN BE CONTACTED?

**E. J. LEGG**, Executive Director  
Toronto Area Rail Transportation  
of Dangerous Goods Task Force  
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Willowdale, Ontario M2N 6A5  
(416) 224-4591











# Dangerous goods rail by-pass Dec 4/87 opposed by Toronto residents

BY KIRK MAKIN  
The Globe and Mail

Toronto area residents do not seem to want a major new rail system to move the dangerous goods traffic away from Metro Toronto, a study for a federal task force has found.

"In general, there appears to be little support for shifting risks by rerouting through less densely populated areas within the Toronto area," the consultant's report said in what it termed a "rather surprising finding."

The vast majority of residents are instead willing to live with major rail lines snaking through populated areas — if the system is improved, the consultants reported to the Toronto Area Rail Transportation of Dangerous Goods Task Force.

Opponents of the rail system reacted angrily last night, but the finding could well find favor with the federal Finance Department, since another report estimated that the alternative railway route options could cost up to \$1.69-billion.

The results were contained in a blizzard of consul-

ants' reports revealed at a public meeting. They covered topics ranging from buffer zones and emergency response to routes and risk assessment.

The reports will be circulated to get reaction from interest groups and all levels of government before the task force arrives at its final conclusions. It is due to report its findings to the federal Government in March, 1988.

Another study released last night estimated it would cost between \$2.6-million and \$4.2-million simply to upgrade emergency preparations for municipalities along the existing east-west rail lines.

Yet another found that train movement is "most stable" in the range of 56 to 72 kilometres per hour and recommended speed limits in this range for most trains carrying dangerous goods.

That report said speeding up and slowing down should be avoided, since this is when many accidents happen.

The authors of the public perception report interviewed more than 1,000 residents of the Metro Toronto

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## Public 'prepared to accept' risks of rail transportation

● From Page One

region. They concluded the public "seems prepared to accept rail transportation of dangerous goods as a necessary concomitant of modern urban life."

Those interviewed said safety is a major concern. Half of them would pay \$250 a year to ensure the highest safety standards on the existing rail system. "There is a clear mandate to spend public monies to reduce risk," the study concluded.

The report also found Toronto residents are more sanguine about potential rail disasters than residents of other large Canadian cities.

It concluded this was because of the happy ending to a derailment in 1979 in Mississauga. "The same hypothesis probably explains why residents of Mississauga are most comfortable with the existing system," it said.

It found that an "anti-rail sentiment was not evident in the population, although there is a minority group of very concerned citizens who are opposed to the current system because of the danger it imposes."

Some of the findings baffled and annoyed a representative of the Metro Toronto Residents' Action Committee, Harry Behrend. "I believe there may be an overzealousness on the part of the consultants to project certain factors," he said.

He commended the task force for moving quickly, but criticized the federal Government for not acting on an obvious danger. "You cannot evacuate the people of Toronto in an

emergency," Mr. Behrend said. "There is no justification for this risk to the public of Toronto."

He said M-TRAC wants a northerly route chosen quickly to reroute tens of thousands of rail cars of dangerous goods that traverse the region each year.

The impetus for the task force came largely from the 1979 Mississauga derailment, in which much of the city was evacuated after a train containing chlorine cars derailed and caught fire. No one was injured.

Harold Gilbert, chairman of the task force, told reporters last night that the task force must weigh the costs of different options with risks to safety and the environment.

One study found that, from 1980 to 1985, there were no deaths in 14 accidents involving rail cars transporting dangerous goods.







# M-TRAC

*for rail safety*

METRO TORONTO RESIDENTS' ACTION COMMITTEE

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Without Prejudice

April 10, 1987

Mr. E.J. Legg  
Executive Director  
Toronto Area Dangerous Goods Rail Task Force  
4900 Yonge Street Suite 200  
Willowdale, Ontario M2N 6A5

Dear Mr. Legg:

Requested comment--Draft Report Public Perception Survey

You have asked for comment on the above report. I think we would all agree that the Public Perception Survey should be well formulated and balanced.

The report should contain a chart or layout showing the approximate location of the respondents in relation to the rail lines carrying dangerous goods, including the North Toronto Subdivision. The illustration should show populations by regions.

The reason for selecting only 200 respondents from the entire Metropolitan Toronto area should be spelled out. Why not 200 from each major city in Metro? You will note that the City of Toronto, which is the focus of the gravity of the evacuation problem, is "buried".

Problems associated with evacuation difficulties in the high-density downtown Toronto area are not addressed. In fact, the draft does not contain major assignments in the work process, including alternative land uses, buffer zones, speeds and who should pay for improved safety.

The over-all findings of Ekos Research Associates Inc. of Ottawa are highly significant and confirm in a general way what others have discovered about the deep unease over dangerous goods rail transport in the high-density Toronto area. But the sweeping manner in which the consultant defines Toronto as virtually a big chunk of southern Ontario may lead to confusion.

On page (i) of his Executive Summary the consultant states:

"Concern over rail transport of dangerous goods is lower in Toronto than in other major Canadian urban centres."

I first read that as meaning Toronto, as I know it, but it turns out that it is Toronto, including the City of Toronto, the City of Scarborough, the City of York, the City of North York, the City of Etobicoke, the Borough of East York, as well as the Regions of Durham, Peel, York and Halton. He may be technically correct within the bounds of his assignment but how is the man on the street going to read it?

The language of this report should be clearly defined since this document may appear in court and must be capable of defence.

On page (ii), para 3, the consultant maintains the "public" does not "support the principle of shifting risks from more densely populated areas within the Toronto area." Who, in this case, is the "public"? Does he mean to imply that the people of the city of Toronto would not support relocation of the North Toronto Subdivision? Or is he trying to say that the people of Halton, Peel, York and Durham would not like to see the North Toronto Subdivision moved to their doorstep?

There is a very strange, creepy feeling coming out of this report that the consultant deliberately arranged his editorial comment for a specific purpose. I hope this is not the case.

For example, at the bottom of page (ii) the consultant writes of a "general recommendation" for "reform rather than revolution." What is "reform" and what is "revolution"? He adds: "There is no clear public mandate for massive restructuring for the rail transport of dangerous goods system." What is "massive restructuring"? He goes on: "In fact, any attempt to shift risks by rerouting through less densely populated areas within the Toronto area is likely to be met with staunch resistance from those affected . . ." Is he saying the people of Halton, Peel, York and Durham don't want the risk of the dangerous goods on their doorstep? If so, why doesn't he say so and try to back that statement by the views of his respondents--if such was the case?

On page 1 of his Introduction, the consultant writes of the Mississauga derailment as having been "highly visible." What does he mean and what is he inferring? And what is this about "vigorously" reported rail accidents? Is he suggesting the press intentionally unbalances news reports? He better back this up or remove the remark.

On page 2, he surmises that the Burton-Post recommendations for relocation of the North Toronto Subdivision involve "profound" economic costs and goes on to submit an estimate of more than \$1 billion. Who gave him this figure? What right has he to intrude on a matter beyond his experience and his survey, thereby putting in a plug against relocation? The more I see of this stuff in the report the more concerned I become that the consultant sought and obtained consultation.

In that same paragraph he writes of a "complex and treacherous problem" and I shudder to think of the "treacher;" he has discovered.



Mr. E.J. Legg -- 3

On page 3.3 of Methodology the consultant explains his weighting strategy and unfortunately it is not clear how much weight within Metro the consultant gave to the area where the problem is most acute, the downtown Toronto area which has the highest density and the most difficult evacuation problem. It should be made clear whether the people in this area prefer or do not prefer to see the dangerous goods rail line relocated. I do not understand his statement on page 23 that "Generalisability of the wider greater metropolitan population should be quite good and the distribution of our sample population is not unreasonably out of sync with the wider population."

The only place where we finally get a brief sense of what goes on in the downtown area is on page 32 where the consultant records "Levels of concern were highest in the downtown Metro area." What is the downtown Metro area? He may mean downtown in the City of Toronto or he may mean downtown in the City of North York.

On page 40 he speaks of a "hard core skeptical group who are opposed to the transport of dangerous goods." Does he mean the transport of dangerous goods through high-density areas and narrow corridors or does he mean that this so-called "hard core" which seems to number about 500,000 or more do not want to see dangerous goods trucked or railed or shipped in any form anywhere? And what is the "truly hard core"? Is he trying to evoke a sinister body of extremists, equivalent to hard-core porn or hard-core drugs? Maybe that goes on in his "sync" mentality.

I sense a determination here to root out the "anti-railists"--the consultant being confronted with a bunch of dumbheads who simply cannot be convinced of the wonderful job the railways are doing to protect the public. It would be interesting to see what this consultant discovered when he did his survey for the Canadian Chemical Producers. He doesn't seem to know the history of the struggle to get the railways to conform to a reasonable pattern of safety, to the point where CP Rail had to be ordered by the Canadian Transport Commission to instal hot-box detectors in the Toronto area--right in the midst of a public hearing. He doesn't know the struggle to eliminate switches and jointed rail on the North Toronto Subdivision or the struggle to reduce speeds.

On page 49 he states: "The strongest objection to the rail transport of dangerous goods through populated areas was elicited in Toronto." What is "Toronto" in this case?

At the bottom of page 52 he reports that approximately 34 per cent of the respondents consider it fair to shift the risks of an accident involving the rail transport of dangerous goods to an area where significantly lower numbers of people are at risk. This is a sizable number, suggesting about 1,000,000 of the total population in the surveyed area. The consultant should state whether this 34 per cent resides in Metro Toronto and specifically whether they include downtown Toronto.

The strain of accepting the declared objectivity of this report increases at the bottom of page 64. The bulk of low-knowledge and high-knowledge groups clearly indicate that risk of a rail accident must be reduced to a minimum but because there is a small difference in percentages between the two groups, the consultant finds it necessary to conclude:

"It would appear that those people who are more knowledgeable about the transport of dangerous goods by rail are less likely to see a need for expensive major changes to the current system."

Why place such emphasis arising from minor percentage differences when the burden of evidence demands reduction of risks to a minimum from all groups, including higher taxes if necessary?

On page 69 he states that the public concern over rail transport of dangerous goods in "Toronto" seems to be "somewhat lower than in other places in Canada." He should define once more what he means by "Toronto" and if possible clarify that he is not speaking of the City of Toronto but some broad sweep of Ontario well beyond the Toronto tax boundaries.

He goes on: "this is an initially surprising finding given the Mississauga accident and the presence of a group such as MTRAC in Toronto." Why is M-TRAC singled out in this report? Why didn't the consultant concern himself whether CN is doing a better job than CP in protecting the public? Or whether the Canadian Transport Commission is meeting its obligations under the law? Or whether the Toronto Board of Education is doing a better job of informing the public about the dangerous goods problem? Does he hold the view that M-TRAC may have sought to exasperate a difficult situation? Is he aware that because of M-TRAC the risks have been reduced, at least temporarily?

In any case M-TRAC does not cover the area which the consultant defines as "Toronto". But his rather crude insinuations cannot go unchallenged. This letter therefore serves notice that the right to take whatever action is required is reserved.

On page 70 he states: "There seems to be a consistent group of highly concerned citizens who constitute anywhere from 15 to 30 per cent of the population although the truly hard-core position is around 15 per cent. They tend to hold their views in an extreme fashion and are unlikely to moderate them. They also tend to be very intolerant of the existing system and quite unhappy with industry."

What system and what industry? Where are these 500,000 to 1,000,000 people located? And how can he relate that statement with the one on page 71: "In fact, we found anti-rail sentiment in Toronto much lower than in other large Canadian centres." You mean there are more than 1,000,000 hard-core anti-railists in other Canadian communities?

And how do you account for this massive number of anti-railists in the so-called "Toronto" being described on page 71 as:

"The hard-core anti-group tends to be negatively disposed to industry but represents a minority view."

True, a minority but what a massive minority!

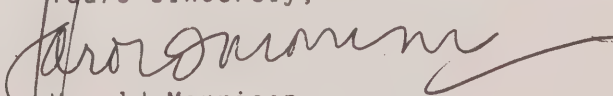
The vagueness of subjective editorialism is seen again on page 73: "People do not agree with the principle that it is fair to shift risks from a more densely populated area to a lesser populated area." Who are these "people"? Where do they live? The sentence that follows says one-third of the entire "Toronto area" supports this "notion." Is it possible that this one-third--which would be roughly equivalent to about 1,000,000 or more people--live mostly in the true Metro area? It would seem important that the consultant spell this out.

On page 76 we have the Summary of Conclusions. This summary is not really substantiated by the "hard-core" results of the survey. There certainly is no clear indication in the survey that the majority of those who live and work near the track in the Metro Toronto area would be content with mere public information and education, enhanced emergency response and better rail training. These are useful adjuncts to the major finding that the people want risks reduced to a minimum; they are willing to see their taxes increased to get more protection and substantial numbers--probably in the range of 1,000,000 or more--want to see the dangerous goods traffic shifted.

That would appear to be the true finding of this survey and I am perplexed why the consultant did not include those significant points in his summation.

On the whole, there are very significant findings in this survey but unfortunately the crude intrusion of opinionated matter reduces the credibility of the report.

Yours sincerely,



Harold Morrison  
Chairman of M-TRAC and  
Member of the Task Force.









# M-TRAC

for rail safety

METRO TORONTO RESIDENTS' ACTION COMMITTEE

181 University Avenue, Suite 1202, Toronto, Ontario, M5H 3M7

Telex 065-24481

Phone (416) 365-0300

November 20 1987

Mr. Harold Gilbert  
Chairman  
Toronto Area Rail Transportation of  
Dangerous Goods Task Force  
4900 Yonge Street Suite 200  
Willowdale, Ontario M2N 6A5

Dear Mr. Gilbert:

## Speed Study-Executive Summary

It appears there is doubt that some of the conclusions expressed in the Delcan executive summary, distributed to us on November 19, are based on fact.

I have examined Canadian Transport Commission studies for the 1984-86 period and can find no reason to conclude that lowering speeds of dangerous goods trains causes more accidents. Most reported derailments occurred at higher speeds. Some derailments occurred at lower speeds but the CTC explanation is that most of these accidents were track related. And it is obvious that had these trains proceeded at higher speeds the ensuing damage would have been more severe.

It is my view that it was incumbent on the consultant to have advised you of that recorded material. Indeed, it would seem that the consultant's source material, while claiming to embrace the full Canadian experience, was largely based on United States material, with Canadian material larded in.

I would suggest that the executive summary, as we have seen it, is unrepresentative of the Canadian experience, let alone the problems of the Toronto area. As you know, the opportunity for derailments increases in an urban area, perhaps because of higher traffic, switches and other problems.

I also took the liberty today of conferring with Washington authorities and some parts of the executive summary was read to them over the telephone. I was advised that there is no consultant who can conclude in fact that the number of mainline accidents increases through lower speeds. Such a study would cost \$500,000 or more. Hunting is a problem at high speeds but only if applied to empty, not loaded cars. The so-called "window of stability" at 35 to 45 miles per hour is not sustainable (a cruder word was used). If you compare equivalent track conditions, the frequency of accidents <sup>increases</sup> occurs at speeds of 40 miles per hour or more.

Mr. Harold Gilbert -- 2.

Further, I have examined the Canadian Transport Commission's 1986 summary of accidents, issued a month ago, and find a new section dealing with serious collisions and derailments for the 1984-86 period. Such accidents resulting in property damage exceeding \$500,000 increased in 1986 to 15 from 6 in 1985. Total collisions and derailments in this "serious" category increased to 63 in 1986 from 59 in 1985. For the country as a whole total derailments increased last year to 144 from 142 in 1985. These are derailments related to dangerous goods. Over-all derailments declined to 259 from 278.

I have to conclude there is deficiency in the Delcan executive summary, as well as confusion and perhaps misleading statements based on ignorance or lack of research rather than deliberate deception.

I cannot support the findings in the executive summary and have some concern that the document may lead the uninformed public to false conclusions.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "Harold Morrison". The signature is fluid and cursive, with a long horizontal stroke at the end.

Harold Morrison.







Transport  
Canada

Transports  
Canada

Canada

# INFORMATION

No. 112/86

For release  
May 22, 1986

## CP REDUCES TORONTO TRAIN SPEED

TORONTO - Special dangerous goods freight trains and other hazardous commodity-carrying freights will be slowed down immediately in a densely-populated area of North Toronto, Transport Minister Don Mazankowski announced today.

CP Rail's North Toronto-Galt subdivision was of specific concern to the minister when he appointed the Toronto Area Dangerous Goods Rail Task Force in March, asking for a recommendation in 45 days on speeds of dangerous goods-carrying trains passing through the Toronto area.

"I have agreed with the task force's recommendation to accept CP Rail's offer to voluntarily reduce the speed of all trains carrying dangerous goods on a section of this line," Mr. Mazankowski said. "I am pleased this measure has been agreed upon on a cooperative basis by the railway and the task force."

The speed limit for special dangerous goods freight trains will be reduced to 40 km/h from 56 km/h (25 mph from 35 mph) and the other dangerous goods trains to 56 km/h from 80 km/h (35 mph from 50 mph).

The subdivision, the task force's report noted, is "in excellent repair" with welded, heavy-gauge steel tracking; hot-box and dragging equipment detectors; special surveillance and inspection routines; and separated grade crossings at all but two intersections (the two at-grade intersections, protected by automatic gates, are on quiet side streets).

Very few freight cars -- about two per cent -- on the North Toronto subdivision carry dangerous goods, the task force said, although their movement affects 30 per cent of all train movements in the area.

It's our year!

in motion...in touch



C'est notre année!

en mouvement...au courant

"CP Rail is to be commended for its efforts and its dedication to safety in upgrading this track to its present condition," task force chairman Harold Gilbert, of Toronto, said in a letter this week to Mr. Mazankowski.

The seven-member task force -- representatives from the railways: the Metropolitan Toronto Railway Action Committee (MTRAC), a citizens' group that promotes railway safety; the Province of Ontario and two members of the public; headed by Mr. Gilbert, former deputy minister of transportation and communications -- made four recommendations with which the minister has concurred.

Quoted from the report, the recommendations are:

1. You accept CP Rail's offer to reduce voluntarily the speed of trains carrying Special Dangerous Goods between the West-Toronto diamond and Leaside, from 35 mph to 25 mph.
2. You accept CP Rail's offer to reduce voluntarily the speed of all trains carrying all other Dangerous Goods between the same two points, from 50 mph to 35 mph.
3. Considering the conditions under which CP Rail made their offer, you authorize the Task Force to undertake the public perception and land use review asked of it by CP Rail.
4. You request that the Directorate of Dangerous Goods review, on a priority basis, the commodities listed under the classification of Dangerous and Special Dangerous and to have those lists modified as deemed appropriate.

The task force is to present a final report in two years. It will examine other issues such as the feasibility of re-routing or relocating dangerous goods rail shipments now moving through Toronto, including the regional municipalities of Durham, York, Peel and Halton.

----

Contact: Tom Van Dusen  
Minister's Office  
(613) 996-7501









## National Transportation Safety Board

Washington, D.C. 20594

January 15, 1988

Mr. Harry B. Behrend, P.Eng.  
Deputy-Chairman  
Metro Toronto Residents' Action Committee  
181 University Avenue  
Suite 1202  
Toronto, Ontario M5H 3M7

Dear Mr. Behrend:

As per your request, selected staff members from the Bureau of Accident Investigation and Technology have reviewed the DECCAN Summary Report entitled, "Relationship between Train Speed and Incidence and Severity of Accidents" and have the following comments:

1. An extremely superficial treatment of an admittedly complex subject.
2. Probably the kindest thing can be said is that it is a definitive outline and a decent bibliography for what could be an interesting report.
3. It is intuitively obvious that more cars will derail at higher speeds and that with the force involved, one would expect greater damage and releases of hazardous materials.
4. We are not certain that the data is available to accomplish what this report probably intends. The best thing that could be done would be to choose a segment of railroad in Canada (or the United States) and document all accidents, with this specific relationship in mind.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. O. Armentrout", is written over the typed name and title.  
J. O. Armentrout  
Director  
Bureau of Accident Investigation









VERIFIED VIA FAX, FEBRUARY 1, 1988  
BY NATIONAL TRANSPORTATION SAFETY BOARD,  
WASHINGTON, DC

NOTES ON DISCUSSIONS ON RELATIONS BETWEEN SPEED AND RAIL  
ACCIDENTS, NATIONAL TRANSPORTATION SAFETY BOARD, WASHINGTON, D.C.,  
JANUARY 28, 1988.

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Present: Mr. Charles H. Batten, Chief,  
Hazardous Materials Accident Investigation  
Division, NTSB  
Mr. Bill Fletcher, Chief, Surface Transport  
Bureau of Technology, NTSB  
Mr. Rie Kidman, Task Force Project Director  
Mr. Harold Morrison, Task Force Member  
-----

Mr. Batten opened the discussion by explaining the mandate and operations of the National Transportation Safety Board, including the manner in which the Board's files are open for examination; introduction of NTSB evidence in court procedure; the effectiveness of NTSB recommendations. He acknowledged there is still some difficulty obtaining Department of Transportation acceptance of some Board recommendations, although the Board can bring influence to bear on the Federal Railroad Administration through Congress. Generally, DOT is found to accept about 60 per cent of Board recommendations; industry acceptance ranges up to 80 per cent.

Mr. Kidman asked for further explanation of comment by Mr. T.J. Armentrout, Director, Bureau of Accident Investigation, NTSB, written January 15, 1988, on the Delcan speed summary which had been prepared for the Task force.

Mr. Armentrout's comment came at the request of M-TRAC Deputy Chairman Harry Behrend. Mr. Armentrout's letter stated:

1. An extremely superficial treatment of an admittedly complex subject.
2. Probably the kindest thing can be said is that it is a definitive outline and a decent bibliography for what could be an interesting report.
3. It is intuitively obvious that more cars will derail at higher speeds and that with the forces involved, one would expect greater damage and releases of hazardous materials.
4. We are not certain that the data is available to accomplish what this report probably intends. The best thing that could be done would be to choose a segment of railroad in Canada (or the United States) and document all accidents, with this specific relationship in mind.

## Notes on Discussions--2.

Mr. Fletcher said what bothered him was the cranking in of speed in considering the frequency of accidents or in trying to prove that one speed will lead to more accidents than another. A great many factors had to be considered: conditions under which accidents occurred had to be sharply defined.

Mr. Batten said there are various classes of track in the United States and each class of track had to be treated separately. He stated further that he did not have confidence in the data system to make the judgements found in the Delcan summary. Accidents have occurred in the U.S. which did not appear in the data system. "We do not have confidence in our data base," Mr. Batten said, adding: "You don't use a faulty system to prove anything."

Mr. Fletcher suggested one way to proceed, in studying the relationship between speed and accident frequency, is to take a segment of track and gather full statistics on performance over a period, say, of five years. Mr. Fletcher suggested another approach would be to take the entire system and gather full statistics for, say, a day or a week.

Mr. Batten spoke of the difference in train handling between less populated areas and high-density areas. In the less populated areas there is more room and more time for the train crew to deal with possible errors. In populated areas a slower speed will give the crew more time to react; more time to judge activity at crossings; to judge signals and therefore there is more reason to slow down.

In dealing with slack, Mr. Fletcher said that engineers can be taught to manage slack action in a "float" situation in undulating territory but if you are going at high speed slowing down rapidly can cause you a problem.

Mr. Batten acknowledged that a large number of U.S. cities have demanded and obtained rail slowdowns in their communities. Some have speed limitations of 35 mph; others at 25 and others at 20 and 15 mph. He does not believe that these speed restraints have led to any increase in accident frequencies in these communities. He noted that this slower speed does provide more reaction time for train crews.

Asked why the FRA doesn't maintain regulations on local speed limitations, Mr. Batten suggested the FRA probably doesn't feel it has to deal with the subject since the cities have the power to obtain restrictions through local action.

### Notes on Discussions--3.

Mr. Batten commented that the FRA doesn't do a lot of things it should be doing.

He suggested that placement of cars within trains is extremely important. He emphasized that a study should be performed to determine the safest location for the placement of loaded and empty tank cars. Accidents have shown that car placement affects greatly the ability of an engineer to safely operate a train and affects the outcome of derailments. Mr. Fletcher noted that trains running at about 40 mph seem to have a smoother operation; simply an intuitive observation.

Mr. Batten, in commenting on Delcan so-called window of stability speed, said his objection is that no one should try to reach a conclusion with data that he knows is deficient and it is equally wrong to not acknowledge such deficiencies and the range of error that could result in any analysis of deficient data.

Both Mr. Batten and Mr. Fletcher stressed the need for an adequate data base. Mr. Batten suggested that perhaps 50 or 60 per cent of transport accidents in highway transportation are not reported. The Department of Transportation has no "exposure" data. When a report comes out saying that accidents have been reduced by 15 per cent, you have to ask: what does this mean? Both FRA and AAR figures were "a little shaky".

Mr. Fletcher observed that U.S. railroads do not have a good image among the American people. "They seem traditionally to dislike the railways." He agreed this may have been the result of a history of arrogance and a poor public image of U.S. railroad proprietors.

Both Mr. Batten and Mr. Fletcher agreed that leakage of hazardous materials tank cars is a continuing problem and suggested that shippers rather than carriers are to blame. Shippers overloaded cars, didn't tighten up fittings, didn't fully close valves. Given certain products, "I would be very concerned" about these leaks, Mr. Batten said. The threat to the public outside the right of way was evident. In the 1986 San Antonio derailment, the resulting fireball was just one mile from a disaster area. But in recent years, tank cars performed better, Mr. Batten added. However, there now are moves that would allow poisons never before shipped by rail to be included in such shipments.

Mr. Fletcher suggested it would be safer to move certain products, including nuclear products, by rail rather than by truck, and that over-all safety should be a consideration in managing these products.

#### Notes on Discussions--4.

Turning again to local speed restraints, Mr. Batten said the municipalities have been known to stop speeding trains and hand out tickets. His intuitive feeling is that a slower train provides more response time between the train and the public. He suggested it also may make good sense to have shorter trains, using smaller locomotives or fewer locomotives, as an answer to marshalling problems.

Abuse of drugs and alcohol still is a problem in the rail industry. It was still on the upgrade although eventually it would decline under testing regulations. Good progress so far. Question of what will happen in the future.

Mr. Fletcher touched again on the use of a segment of track to test for possible relationship between speed and accident frequency and severity. Pilot test would have to be carefully designed and consultant chosen with care to ensure independence. Mr. Batten said there is always the possibility of customer pressure on the consultant; on the consultant bending with the pressure.

Both Mr. Batten and Mr. Fletcher agreed that buffers would be useful in reducing severity of consequence but they did not know what size of buffer area would be adequate. Mr. Fletcher provided Mr. Kidman and Mr. Morrison with a copy of a NTSB 1982 report with lateral distances travelled by a derailed car, based on 298 NTSB investigations. The distance ranged up to 800 feet.

Mr. Fletcher said that some of the NTSB recommendations, following an investigation, may appear outrageous to some people but the NTSB cannot worry about the possibility of acceptance. Sometimes it take what appears to be an unworkable recommendation to get at least a response which may be less than what is fully recommended. You have to get what you can, he said.

The major point of the over-all discussions was the vital need for a good data base covering both the United States and Canada. This might be developed through a co-ordinating Canada-U.S. body relating regulation and investigation on both sides of the border. Mr. Batten and Mr. Fletcher were assured by their visitors that this is a subject within the Task Force mandate.

Harold Morrison  
January 29 1988.







**EXAMPLE OF U.S. RAILROADS  
SPEEDS IN URBAN AREAS**

Houston, Texas	20	mph
Livingston, Louisiana	25	"
Atlanta, Georgia	30	"
Denver, Colorado	10 - 15	" (average)
New Orleans, Louisiana	25	"
Birmingham, Ala.	15	"



# M-TRAC

*for rail safety*

METRO TORONTO RESIDENTS' ACTION COMMITTEE

181 University Avenue, Suite 1202, Toronto, Ontario, M5H 3M7

Telex 065-24481

Phone (416) 365-0301

January 19 1988

Mr. Harold Gilbert  
Chairman  
Toronto Area Rail Transportation of  
Dangerous Goods Task Force  
4900 Yonge Street Suite 200  
Willowdale Ontario  
M2N 6A5

Dear Mr. Gilbert:

Evidence on relation of speed and accidents

I have today sent to Mr. Kidman copy of a letter from Mr. T.J. Armentrout, Director of the Bureau of accident Investigation and Technology, National Transportation Safety Board, Washington, relating to the Delcan speed summary. The letter speaks for itself.

In addition, we have telephoned Mr. Ed Handley, general manager of the Port Terminal Railway at Houston, and Fire Chief Jessie Glascock of Livingston, La.

Mr. Handley sends his regards to you and advises that he has 320 miles of track, including 32 miles of mainline CWR, and that he abides by the municipal speed of 20 miles per hour, without any evidence of harmonic roll. He handles about 5,000 carloads daily--about 35 per cent dangerous goods--and his track is capable of carrying trains at 60 miles per hour.

Chief Glascock says that following the Livingston derailment of 1982, the parish train speed was reduced to 25 miles per hour over a 60-mile stretch and as far as he knows, there has not been any accidents since.

Yours sincerely,



Harold Morrison.





# National Transportation Safety Board

Washington, D.C. 20594

MAY 14 1986

Mr. H. B. Behrend, P.Eng.  
M-TRAC  
181 University Avenue  
Suite 1202  
Toronto, Canada M5H 3M7

Dear Mr. Behrend:

Here in the States, railroads use their operating rule books, bulletins and timetables to convey to their train crews the different city ordinances governing the speeds of trains. Since hundreds of cities in the States impose speed restrictions on trains, I have enclosed two railroad timetables as examples of the number of cities that do have rules to control the speed of trains and the great variation in speed from city to city. You asked why the speed of 25 miles per hour was the predominate speed imposed by most cities. Many municipalities here in the States restrict the speeds of trains within their city limits to 25 m.p.h. Also I believe each state has a regulation requiring each train approaching a grade crossing to sound the bell and horn (when not prohibited by city ordinances) 20 seconds prior to occupying the crossing no matter what the speed of the train may be and many of the cities view this as inadequate notice for high speed trains. You asked if reduction of train speeds would improve public safety? The cities that have reduced the speed of trains did so in the name of public safety and as you know each time you double the velocity of a moving object you quadruple the force of the object. I don't think any one would disagree that speed contributes to the degree of damages in a train derailment. I have enclosed some recommendations made by the Safety Board in an attempt to reduce the risk of derailed equipment striking hazardous materials storage tanks near railroad main tracks. Also, you asked about a consultant's study concerning forces versus speed, by staff talked to Clif Gannett, Research and Development, Federal Railroad Administration, he said in 1980, A.D. Little did such a study entitled "Issues and Dimension of Freight Car Size The Compendium", this study can be purchased from the National Technical Information Service, Springfield, Virginia 22161, you should ask for publication PB81-116998. As Always, I enjoyed talking to you and if I can be of further help please call.

Sincerely,

A handwritten signature in dark ink, which appears to read "Charles H. Batten", is written over a horizontal line.

Charles H. Batten  
Chief, Hazardous Materials and  
Pipeline Accident Division







**Canadian Transport  
Commission**

**Commission canadienne  
des transports**

**RAILWAY  
TRANSPORT  
COMMITTEE**

**COMITÉ  
DES TRANSPORTS  
PAR CHEMIN DE FER**

**CASE/CAUSE:**

**VOLUME:**

**LOCATION/ENDROIT:**

**DATE:**

VOLUME 8

HULL, QUEBEC

OCTOBER 16, 1986

**Canada**

*"for the Record . . ."*

**STENO TRAN**  
1376 KILBORN AVE.  
OTTAWA 521-0703

1 COMITE DES TRANSPORTS PAR CHEMIN DE FER

2 RAILWAY TRANSPORT COMMITTEE

3  
4 RELATIVEMENT à une requête présentée par Canadien Pacifique  
5 Limitée, en vue d'obtenir l'approbation des modifications  
6 aux Règles 19, 19A, 90A et 102 du Règlement n° 0-8 de la  
Commission canadienne des transports, Règlement unifié  
d'exploitation, C.R.C. 1978, chap. 1175;

7 RELATIVEMENT à une requête présentée par la Compagnie des  
8 chemins de fer nationaux du Canada, en vue d'être dispensée  
9 de la Règle 90A du Règlement n° 0-8 de la Commission  
canadienne des transports, Règlement unifié d'exploitation,  
C.R.C. 1978, chap. 1175; et

10  
11 RELATIVEMENT à une décision du Comité des transports par  
12 chemin de fer, datée le 16 septembre 1985 concernant l'essai  
des trains circulant sans fourgon de queue.

13 Références n<sup>os</sup> 43757R90-A.1  
14 43757R90-A.2

15 IN THE MATTER OF an application filed by Canadian Pacific  
16 Limited for approval of amendments to Rule 19, 19A, 90A  
17 and 102 of the Canadian Transport Commission's Regulations  
No. 0-8, Uniform Code of Operating Rules, C.R.C. 1978,  
c. 1175;

18 IN THE MATTER OF an application filed by the Canadian  
19 National Railway Company for relief from Rule 90A of the  
20 Canadian Transport Commission's Regulations No. 0-8,  
Uniform Code of Operating Rules, C.R.C. 1978, c. 1175; and

21 IN THE MATTER OF a Railway Transport Committee Decision  
22 dated September 16, 1985 pertaining to the testing of  
cabooseless train operations.

23 File Nos. 43757R90-A.1  
24 43757R90-A.2

SIEGEANT DANS LA SALLE PONTIAC, PLACE DU PORTAGE,  
PHASE IV, 140 PROMENADE DU PORTAGE, HULL (QUEBEC),  
LE 16 OCTOBRE 1986 A 0930 HEURE LOCALE

SITTING IN THE PONTIAC ROOM, PLACE DU PORTAGE,  
PHASE IV, 140 PROMENADE DU PORTAGE, HULL, QUEBEC,  
OCTOBER 16, 1986, AT 9:30 A.M., LOCAL TIME

---

PANEL

Avocat de la Commission/Commission  
Counsel S. Pépin

Avocate de la Commission/Commission  
Counsel P. Hassard

---

AUSSI PRESENT/ALSO IN ATTENDANCE

Agent à l'établissement des audiences/  
Hearing Process Officer B. Henri

---

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Président du C.T.C.F./  
Senior Advisor, Office of the  
Chairman of the R.T.C. G. McLaughlin

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20	Don Rosenbloom	Lawyer, British Columbia Caboose Committee
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23		
24		
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1 job on a day-to-day basis.

2 MR. RUDDER: In some states, yes.

3 Q. And New Orleans, what is the  
4 situation in New Orleans, Louisiana?

5 MR. RUDDER: In Louisiana, they have  
6 -- their by-law is, I believe, the state Department of  
7 Transportation that has jurisdiction in these matters.  
8 What is your -- I know they have passed some laws in  
9 the State of Louisiana that -- as a result of the  
10 accident that happened at Livingston a few years ago.

11 Q. Right.

12 MR. RUDDER: Of course, that dealt with  
13 drugs and alcohol. Since that time, there has been a  
14 federal regulation issued that provides for post-accident  
15 testing for drug and alcohol use.

16 Q. Right.

17 MR. RUDDER: I think probably the Louisiana  
18 law you are talking about dealt with that.

19 Q. As a responsible company, I guess you  
20 try to make sure that when you are operating your trains  
21 through urban areas that you comply with the municipal  
22 ordinances.

23 MR. RUDDER: Yes, we do.

24 Q. What I am leading up to is the  
25 question of speeds.

1 MR. RUDDER: Yes.

2 Q. I can see that in a lot of high-  
3 density urban areas, that is a matter of considerable  
4 concern. Would you not say so?

5 MR. RUDDER: Yes.

6 Q. Can you tell us -- for example, you  
7 are based in Atlanta, are you?

8 MR. RUDDER: Yes.

9 Q. In the case of Atlanta, are there  
10 speed restrictions in effect on your rail operations  
11 and to what extent are you restricted?

12 MR. RUDDER: I can answer it this way: Yes, we  
13 are and we publish in our operating timetables the ordinances  
14 as they exist. We list by mile post location where the  
15 speed restriction is, and it is the same as any other  
16 speed restriction; it is a published restriction and  
17 we expect our crews to comply with them.

18 Q. When you say it is like any other,  
19 are you referring to, say, speed restrictions that you  
20 might have a need for because of grades --

21 MR. RUDDER: Track.

22 Q. -- because of curvature, because of  
23 track conditions.

24 MR. RUDDER: We have authorized track  
25 speeds and it is -- when I say they are like any other

1 speed, it is a speed restriction that -- there are  
2 other speed restrictions published in the timetables:  
3 track speeds, speeds on curves, maximum authorized  
4 speed. And this is a restrictive speed and it is  
5 listed, and we expect them to be complied with.

6 Q. Now, for the enlightenment of  
7 the panel, Mr. Rudder, perhaps you could give us a bit  
8 of a snapshot of Atlanta. It is my understanding it is  
9 a fairly transportation hub.

10 MR. RUDDER: The speed restrictions for  
11 trains in Atlanta is 30 miles per hour.

12 Q. How much?

13 MR. RUDDER: 30.

14 MS HASSARD: Mr. Chairman, I am sorry  
15 to interrupt the cross-examination but I am having  
16 trouble seeing the relevance of this kind of broad-  
17 ranging discussion and I wonder if Mr. Behrend could  
18 explain the relevance of this issue at hand, which is  
19 the operation of cabooseless trains, not general  
20 train operations.

21 THE CHAIRMAN: Mr. Behrend?

22 MR. BEHREND: Well, Mr. Chairman, the  
23 purpose is very simple. We have here a CP panel of  
24 expert witnesses which are giving U.S. experience in  
25 the case of cabooseless operations and non-cabooseless



1 with the regulations that are set out for that purpose.

2 Q. So you are telling us that you  
3 have certain marshalling requirements. We know that in  
4 the urban areas there are speed restrictions frequently  
5 in effect.

6 MR. RUDDER: To my knowledge, I know  
7 of no speed restrictions associated with the handling of  
8 hazardous materials. The speed restrictions that the  
9 municipalities have in effect govern all trains, not just  
10 trains handling hazardous materials.

11 Q. I am sorry, I did not catch  
12 that.

13 MR. RUDDER: Not just trains handling  
14 hazardous materials. I said to my knowledge the ordinances  
15 in speed restrictions that have been enacted by municipalities  
16 cover all trains, not just trains handling hazardous materials.

17 Q. But you as a company, how do you  
18 deal with that subject of moving hazardous materials? Do  
19 you not have a speed restriction on those trains where  
20 you are handling hazardous materials?

21 MR. RUDDER: In one area we do. We  
22 have a large volume of propane gas that we move out of  
23 Draggon, Mississippi, and we restrict -- this volume  
24 amounts to probably when the gas ceases, and this is  
25 generally in the winter months, so probably it runs

. GIBSON, RUDDER, cr-ex (Behrend)

1 40 to 50 cars a day. And this gas moves through Birmingham,  
2 Alabama, and it breakbulks there, I mean it is classified  
3 there and moves to other locations. We restrict the movement  
4 of that large volume of gas on one train.

5 Q. To what speed.

6 MR. RUDDER: We restrict the speed through  
7 municipalities to 15 miles per hour on that one movement.

8 Q. But in general--

9 MR. RUDDER: That, by the way is our  
10 own imposed restriction; that is not one that was published  
11 by a state or a city, or whatever; it was our own doing.

12 Q. And I would suggest that that is  
13 a very responsible move on your company's behalf. But in  
14 general, what I am concerned about is all trains handling  
15 shipments of (1) nuclear reactive fuel, elements irradiated,  
16 (2) radioactive waste materials, (3) radioactive material  
17 shipping containers cask; what speed restriction would be  
18 on those products?

19 MR. RUDDER: 35 miles per hour in a  
20 special train.

21 Q. Thank you, Mr. Rudder. And what  
22 happens when you have one of these trains on a main line?  
23 How do you handle traffic coming from the opposite direction  
24 on an adjacent track?

25 MR. RUDDER: You are probably reading



GIBSON, RUDDER, cr-ex (Behrend)

1 from a recent publication that was-- I think that the  
2 American Association of Railroads have asked the  
3 railroads to endorse. And to my knowledge there has  
4 been very few of these movements of this nuclear fuel.  
5 But the way to plan to handle it -- we have not handled  
6 any on Southern, to my knowledge, but we would handle it  
7 at 35 miles an hour in a special train; opposing trains  
8 would be required to stop.

9 Q. It is stopped completely?

10 MR. RUDDER: It would be stopped.

11 Q. And that would be because of the  
12 possible risk and extra car that may be deemed appropriate.

13 MR. RUDDER: Yes.

14 Q. Thank you. What about things  
15 like lumber? if you have telephone poles, and I would think  
16 that in Georgia that is a sizeable commodity that is coming  
17 from the wood industry there; what sort of precautions do  
18 you take there with regards to speed?

19 MR. HUME: Mr. Chairman, is that a  
20 question relevant to the issue of cabooseless trains? I  
21 do not think so.

22 THE CHAIRMAN: Well, I will have to  
23 hear the question first. He asked about the special handling  
24 of telephone poles. I can visualize these swinging foul  
25 off the car and if that is what is behind the question,



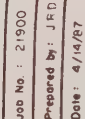
# **Hazardous Materials Rail Transport Risk Assessment and Risk Management Plan**

Prepared for  
**City and County of Denver  
Denver, Colorado**

April 1987

Prepared by

**Woodward-Clyde Consultants**   
Strategic Insights  
Slosky & Company  
Greystone

STUDY AREA MAP AND  
RAILROAD TRACK/YARD  
SEGMENTS

NOTE: BASE MAP PROVIDED BY DENVER PLANNING OFFICE.

Further evaluation by the Advisory Committee regarding the feasibility of each alternative.

In some cases difficulties in predicting the effectiveness of an alternative limited the modeling to estimating an upper bound on the risk reduction potential. This second screening reduced the list from ten alternatives down to six, which are recommended for further evaluation.

## 5.2 THE LIST OF 21 ALTERNATIVES AND THE INITIAL SCREENING

The initial list of 21 risk management alternative are presented below, grouped into five categories.

### 5.2.1 Railroad Plant and Operations Alternatives

1a. Track and Roadbed Improvement and Inspection. Because of recent new track and yard relocations, track and roadbeds in the CPV are in good shape. Therefore improvements were not seen as effective risk management measures. However, there was a general opinion that Federal inspections are currently very limited and city inspection of rail equipment could be an effective means to manage risk. Therefore this alternative was replaced with one of a city inspection program of roadbed, track, and hazmat rail cars. In addition, concrete roadbeds were suggested for critical locations. The latter suggestion may be studied further outside of this project, especially in relation to loading and unloading operations at fixed facilities.

1b. Speed Reductions. Current railroad speed restrictions and rules keep the average speed in Denver down to an estimated 10-15 mph. Setting a slower speed has several unattractive features, such as longer traffic delays and more air pollution. However, from preliminary examinations of the data an assessment of the risk reduction potential of a lower speed limit was made before considering it further.





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for rail safety

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Notes re telephone conversation with Mr. Charles Batten, P.E., Chief, Hazardous Materials & Pipeline Accident Division, National Transportation Safety Board, Washington, D.C.

Subject: Train Speed Reductions

- 
- 1.) There are literally hundreds of U.S. cities that enforce speed limits.
  - 2.) Many cities also limit hours of parking and numbers of tank cars on sidings; i.e. State of California.
  - 3.) It is not uncommon for a police officer to stop a train and issue a ticket for speed violation.
  - 4.) New Orleans, Lo. has a 25 mph speed limit on haz. mat. trains and ban/restriction on haz. mat. tank car parking.
  - 5.) The question of jurisdiction over railway speeds has not been raised nor has it been tested; -- railways have cooperated with municipalities as good neighbours.
  - 6.) Pensacola, Fla., Livingston, Lo., also have speed limits in effect.
  - 7.) East St. Louis has major planning commission examining relocation and/or consolidation of rail yards.

H.B.B., Apr. 21, 1986







=====

PROTECTING CANADIANS AGAINST HAZARDOUS  
GOODS RAIL ACCIDENTS       - - -  
LEARNING FROM AMERICANS

=====

A   P E R S O N A L   V I E W

This commentary is based on a Feb. 22-27, 1987, tour of five U.S. cities representing typical centres of rail activity. They include Chicago, San Antonio, Houston, Boston and Cambridge, Mass. The most outstanding contrasts in achievements emerged in Chicago and Houston. Canada can learn from Houston which, a few years ago, had one of the worst safety records in North America. Then a new personality arrived and attitudes changed.





## CONVINCING THE SKEPTICS

Some Canadian industry and government officials tend to look at Toronto's concern over hazardous goods shipments with skepticism. Why, they ask, is there such outbursts of alarm in the Toronto area when, across the border, there obviously is much greater movement of toxic and explosive chemicals through urban areas with relatively little public criticism?

This suspicion that possibly sinister forces are at work in Toronto to drive up public alarm lingers despite a number of well-documented warnings by independent experts and consultants that the situation in the Toronto area is dangerous and possibly catastrophic and that measures must be taken to reduce the risks associated with the transport of hazardous goods by rail through the heavily-populated downtown Toronto core.

It was with a sense of seeking the truth that a federal Task Force toured a number of American cities in February 1987-- to judge whether there is much public concern in the United States; to discover how local American officials handle the situation and to survey American rail research to determine how much is being done to make rail transport safer.

What <sup>this</sup> member of the Task Force learned is that there is not much difference in Canadian and American public attitudes. There is very deep concern among some public bodies in the United States but the expressions are muted compared to Canada; the politicians and the laws don't help very much and the railways and shippers are powerful and competent in throttling local moves to change federal laws.

### A PERSONAL VIEW

These are personal comments by one member of the Task Force and do not necessarily reflect the conclusions reached by other Task Force members. It would be fair to say that other Task Force members might view the U.S. from a different light.

What this Task Force member has found would suggest there is little point looking to the U.S. to solve our canadian problems in reducing hazardous goods risks in urban areas. Some American cities have made headway, largely by taking advantage of loopholes and exceptions in the American constitutional system while others are still groping for solutions through attempts at regional political alliances to force changes in the federal laws.

### INDUSTRY DOMINATES

Both Canada and the United States hold a basic belief in democratic freedom but apply this belief in different ways. In both countries the strongest economic forces tend to carry the greatest political weight. But in Canada, minority views may gain a bit more attention. For example, it is not likely that the Department of Transportation in washington would set up a federal Task Force to look into complaints by, say, New York that toxic chemical shipments by rail were causing alarm among local residents.

It is more likely that New York would have to appeal to the state which in turn would have to appeal to Congress which then would have to exert pressure on the bureaucracy, while the railway lobby manoeuvres to block any move that would add to rail costs.

### FOLLOW THE LEADER

The different U.S. and Canadian constitutional patterns are well known. But lately there has been a move in Ottawa to pay more attention to Washington policies in the field of transportation, as well as others, on the basis that Canada must remain competitive.

Gripped by the conviction that transport deregulation has brought economic gains for the American industry, the Canadian government has decided that deregulation must also be pursued by Canada. So, in a sense, Ottawa may be playing the game of follow the leader, looking more to Washington for structural guidance and thereby changing the traditional Canadian way of handling Canadian problems.

### MIXED REWARDS

There is evidence that deregulation has stimulated American railroads, although some American utilities are bitterly opposed to the new discrimination in private traffic pricing. There also is the suspicion among American accident investigators that deregulation has brought a more haphazard reporting of rail accidents to the point where railroads' claims to safety records are questioned.

Whatever the facts, it is clear that some states and cities are unhappy with the existing process and want greater authority to exert action of their own to protect their people against the risks of hazardous goods shipments by rail in local areas.

## STRUGGLE FOR CONTROL

A closer view discloses an American hotchpotch of rail safety controls, with the Federal Railroad Administration playing the dominant role and constantly fighting off state and municipal attempts to occupy portions of rail safety authority.

Where the federal authority vacates a specific area of safety administration, the state can step in and provide controls of its own. And in Home Rule states the cities can in turn take over the authority with the state's permission. But again the railroads and shippers are constantly watching, invariably ready to take the matter into the courts on the grounds of jurisdiction, especially when a local safety law hits at the rail industry's pocketbook.

In the U.S. the Federal Railroad Administration is a portion of the Department of transportation but the head of the FRA is not a civil servant but a political appointee usually associated in some way with the rail industry. The FRA decides how many rail inspectors it will have and how vigilant it should be in enforcing safety on the railways. It also orders rail research and collects figures on rail accidents and reviews recommendations for rail safety changes which may be forwarded by the National Transportation Safety Board which is a separate body reporting to Congress.

Sometimes the NTSB is frustrated because the FRA won't take any action. It is fair to say that the FRA is very close to the rail industry and the rail industry carries a lot of weight.

### TEXAS AN EXAMPLE

A fairly recent action by Texas to order the caboose back on certain hazardous goods trains is an example. The state action followed a costly and life-threatening derailment in San Antonio last June. The state argued that control over the caboose had not been exercised by the federal regulatory agency and therefore the state had right to take action but the railways and shippers maintained that putting the caboose back on trains would cost them money and they tied up the state law in the courts. The FRA could have stepped in and given the state a helping hand but it remained silent.

Some states claim the FRA figures on rail accidents are incomplete and that the FRA doesn't do enough to enforce the collection of accident figures. They also say there are not enough federal inspectors to oversee the operation of hazardous goods trains across the country. The FRA took action to order an analysis as to where best to place the existing number of inspectors but did nothing to increase the number. However, in some states it does allow state inspectors to help augment the federal inspection team.

### CHEMICAL FLOW INCREASES

Daily, millions of tons of toxic and explosive chemicals move across the U.S. by road and rail. Most of this traffic is safe. But when mishaps occur, they can be devastating. Does that matter? Are federal laws changed to provide the public with greater protection? Not likely.



"We are not where we ought to be," explains William T. Donahue, Assistant City Manager for San Antonio. "Railways and shippers run a powerful lobby. There is little proactive prevention against disasters."

#### BITTER MEMORIES

Donahue has reason to be bitter. The San Antonio derailment of June 8, 1986, was bad enough. It could have turned into a major catastrophe but for the fine emergency response by a fire department sensitive to dangerous chemicals. Even so, two persons were found incinerated in the debris; a bridge was destroyed along with thousands of fish in a creek below and hundreds of anxious residents had to be forced from their homes for a week.

The big threat was a 400-foot fireball that filled the sky and might have caused a heavy loss of life but for the fact that it exploded over a relatively empty area. A second fireball threatened but fortunately was avoided. Thirty-five cars derailed, including five carrying full loads of butadiene which can suppress the central nervous system and cause death.

"What we're talking about is a matter of life and death," the mayor of San Antonio exclaimed at that time as he called on the Texas Railroad Commission to honour a new state law which would require strict regulations in the movement of hazardous materials by rail. The mayor also wanted track relocation to avoid the built-up areas. The railways offer no encouragement.



### LEGISLATURE JAMMED

Texas is the major petro-chemical state. Thousands of people and hundreds of industries depend on hazardous chemicals for their livelihood. In the area of accident prevention, Texas may be a prime example for the rest of the country. How far has the state legislature really gone to reassure the public that the San Antonio accident could not recur?

"In Texas, the legislature meets every two years and by that time between 4,000 and 6,000 bills are piled up and there is little hope of getting through even part of them," Donahue says.

He adds that there is obviously a community need for action but because of the long gaps between legislature meetings, it is not easy to build up and sustain an active community approach.

So, while there is a need for a comprehensive legislative approach to rail accident prevention, this, he says, has not yet occurred.

### DYNAMISM OF ONE MAN

While the political and economic entanglements and power plays tend to discourage legislative mechanisms for increased rail safety, the driving force of even one man in the right place can do more than a thousand laws. That man is Ed Handley, general manager of the Port Terminal Railroad in Houston, one of the nation's biggest petro-chemical rail centres. In 1980, the Port Terminal had one of the worst safety records of such centre in the U.S. The situation was so bad that federal authorities were even threatening to close the operation.

In desperation, the railroads involved decided to pick a new general manager. They selected Harvard-trained Handley who in less than four years swung yard attitudes so drastically around that the Port Terminal, instead of being the nation's worst, became the best, winning the top Harriman Award for safety in 1985 and 1986.

#### THE KEY TO VICTORY

The big, outgoing Handley didn't succeed without a great deal of work and a great deal of close co-operation with his employees. In matters of safety, he says, there are no bosses and no employees--all work as a team and suggestions are given equal treatment, whether they originate from the boss or the lowest-ranking worker.

The essence of his approach is that safety must come first, followed by efficiency and economics. There is no question of rationalizing safety in terms of costs, so that the company can save a little by skimping on necessities. To Handley, a safe railroad is an efficient railroad and he does everything he can to extract sufficient funds from his board to spend on providing a safer terminal railroad.

And he works closely with the City of Houston to gain local confidence and indeed initiate city actions that can help reach his safety goals. In this way he builds up confidence among city officials who trust him and work closely with him through a special railroad-city committee.

## HURDLES THE SYSTEM

Handley's success demonstrates how political and economic hurdles can be overcome. It is a projection of personality and the ability to persuade both proprietors and employees of the importance of making changes. Of course, Handley might not have done so well if the rail proprietors had simply rejected his demands for more cash to improve the Port Terminal system. They had to realize that the situation was critical. Any observers can see at once that the close proximity of the massive yard with some 156 industries involved and the city with its total inner and outer population of some seven million could lead to an awesome catastrophe should explosions and fires rip through the terminal.

The main line of the Port Terminal stretches about 32 miles with a maximum speed of 20 miles per hour. The Port Terminal involves five trunk lines handling about 500,000 cars a year. The entire operation including the industries represent an investment of some \$15 billion.

Handley spends time working on credibility and safety and concentrates on good working relations with his 500 yard men and the citizens of Houston. He acknowledges that railroads in general have had a bad reputation--the worst public relations "of anybody." The public sees the railroads as having "lied and cheated." But no one can say that of Handley.

## A COUNTRY OF CONTRASTS

If Houston has made progress largely because of the dynamism and determination of one man, Chicago has shown inertia largely because of its massive problems and lack of unified thrust.

A trip over the roads shows a heavy rail network laced through the city. Some tracks are close to houses; others are not. And the dominate feature of tracks running through urban areas is the blight of the neighborhood.

Illinois has had its problems with rail accidents, including the 1983 derailment at Murdock with chunks of ruptured propane tank car rocketting through the air a distance of three-quarters of a mile, perhaps a world record. You can get two views in Chicago--that most of the local complaints about rail safety is based on local inconvenience rather than life-threatening risks and the countering argument that the rail hazardous goods traffic in Chicago is too risky and something must be done to get the lines relocated.

But who is to provide the cash and where are the lines to go? Anyone looking at the heavy rail networks in Chicago would conclude that it is too late. Very little can be done for Chicago. Certainly the funds are not available and the state does not seem eager to step in and help the city.

## ELUSIVE SOLUTIONS

Sharon Pines, chief of staff of the City Council environmental protection committee, says she can't agree with state officials that the outcry in Chicago is based on emotion or inconvenience. She says there are good environmental reasons for local complaints over hazardous goods rail shipments and some city council people are pushing for more local powers to deal with the matter.

Ronald Gibbs, director of the mayor's office, suggests the only political route is to work through the U.S. conference of mayors and the national governors organization to give the cities increased powers to deal with local risks. He talks of a possible alliance of cities, specifically, Chicago, Boston, New York and Portland, Ore., working to get more local powers.

However, he adds that the U.S. may have to witness a catastrophe before U.S. action is taken that could reduce local risks.

## BOSTON HAPPIER

In Boston, you get a different message. Local authorities are concerned over hazardous goods shipments but fortunately Boston is not a centre for "through" traffic. It is more of a terminal for the entry of hazardous goods and the exit through the same route, thereby avoiding the heavily-populated downtown area.

Indeed, Boston appears to be in a better position than many other American cities, although Framingham, some 35 miles southwest, is a rail hub and does have its hazardous goods problems.

### LEADERSHIP LACKING

If Canada intends to seek leadership from the U.S. in the field of transport deregulation, it may be more successful than seeking leadership from the U.S. in dealing with hazardous goods rail accidents. The U.S. political process provides a mixed bag--some states and cities are able to tackle local situations to the benefit of local citizens, while others are still struggling for power and financial help. The dominance of the U.S. rail lobby is evident. Occasionally, a personality emerges, such as at Houston, and this can make the world of difference. But how many handles are around? And how many would be willing to take over the problems in some of our own cities?

If Canada is to obtain solutions, it would appear best to look within the Canadian system for such solutions.

### RESEARCH SHOWS PROMISE

That doesn't mean that what goes on in the U.S. should be dismissed altogether. The research at the Association of American Railroads centre in Chicago is meaningful and while directed at overcoming technical problems within the rail industry, the results can also be helpful in reducing public risks from rail operations. Research is proceeding on such problems as rail gauge widening, buckling, spike pulling; problems of vertical loads and structural fatigue. As a result of this various research, new rail wheel specifications will be made mandatory, along with new steel processing for tank cars. Work is going on improving ballast and axle scanners and researchers are hoping to get funds to do research on aging rail bridges.



## FUNDING A PROBLEM

Getting sufficient funds from sponsors is a problem. The research centre gets its main funds from the AAR, which is the trade body of the American rail industry, including the two major Canadian railroads. The Federal Railroad Administration also provides funds and directs projects for its own needs.

To the extent that these agencies encourage more research the greater are likely to be the benefits to the public. And if these agencies hold back funds or direct funds into specific areas for economic purposes only, then the public will not likely get needed protection.

The same is true for the DOT research centre at Cambridge, Mass. These are capable men but their efforts are restricted by the available funds and the purposes set by the sponsors. At one stage the DOT even thought of closing down the research centre because of budget constraints.

One further problem--how much co-ordination is there between the various American research centres? One centre seems to be aware of what the other is doing but as in Canada, over-all co-ordination and central direction do not seem to be rigidly set.

--Harold Morrison M-TRAC for rail safety  
March 5, 1987.









Transport  
Canada

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Rail Task Force

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June 13, 1988

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Mr. Harold Morrison  
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Dear Mr. Morrison:

Further to your letter of June 10, 1988, please be advised that the editor's name, position and how he was selected is as follows:

Ideasign Communication Consultants  
1-16 Somerset Street W.  
Ottawa, Ontario

Mr. Tim Woods is our editor. He is also one of the principals of the company.

Because of the need expressed by all Task Force Members to have my initial draft edited, it was necessary to get the services of an editor. Due to our tight deadline, we did not want to have to go through a time-consuming contract process. Consequently I contacted a Mrs. Carolyn McQuarrie in Transport Canada, Ottawa.

Carolyn works on internal documentation in the Department; knows several companies and their expertise in this field; and is a lady of high integrity. I trust her judgement totally.

Carolyn recommended Mr. Woods. Both Harold Gilbert and I interviewed Mr. Woods before he started on our job and were satisfied that he could undertake the task we were giving him. (Neither the Minister's office nor anyone in Victor Barbeau's organization has been involved in this process nor are they even aware of how we are going about this editing process).

I regret that you have been unable to give your support to the edited Summary Report. I further regret that you were not able to give me specifics since I might have been able to accomodate you somehow.

Since however, you find the Summary Report totally unacceptable and since all the other Task Force Members have indicated their satisfaction with it, you should be advised that I have written in the Preface of the Summary Report that this Summary Report has the support of all but one Member of the Task Force.

Should you have difficulty with this course of action, may I suggest you discuss this matter with your Chairman.

Sincerely,

A handwritten signature in dark ink, appearing to read "E. J. Legg", with a large, sweeping loop at the beginning.

E.J. Legg  
Executive Director

cc: Harold Gilbert

EJL/bcs



# M-TRAC

for rail safety

METRO TORONTO RESIDENTS' ACTION COMMITTEE

181 University Avenue, Suite 1202, Toronto, Ontario, M5H 3M7

Telex 065-24481

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June 14, 1988

Mr. Harold Gilbert  
Chairman  
Toronto Area Rail Transportation of  
Dangerous Goods Task Force  
4900 Yonge Street Suite 200  
Willowdale, Ontario M2N 6A5

Dear Mr. Gilbert:

Task Force Final Report  
SUMMARY

I have today received Mr. Legg's letter of June 13, 1988, regarding the Task Force Final Report Summary which, according to Mr. Legg, has been endorsed by six of the seven members of the Task Force.

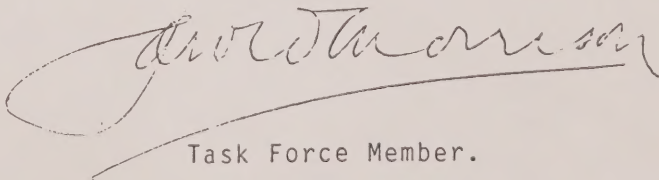
It is strange that the Summary which, in my view, contains obvious inaccuracies, has been written and endorsed even before we are able to see and judge the final version of the main report.

It is also obvious that the Ottawa "editor", apparently selected on recommendation by Transport Canada, lacked experience and understanding of the situation in Toronto. The basic inaccuracies and spurious summations leave me with feelings of deep repulsion.

I have therefore advised Mr. Legg that I cannot accept the Summary document as it is written. I have advised the Minister of my decision.

Should it become necessary to write a separate report, through the use of funds raised in Toronto since you have denied facilities for that purpose, I shall see to it that a copy is sent to you as quickly as possible.

, Yours sincerely,



Task Force Member.







